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LUCA DELLANNA / AVI LOEB / PARAG KHANNA / RYAN HOLIDAY ■

# THE **PODCAST**

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# THE **PODCAST** READER

Welcome to Issue Seven of *The Podcast Reader*, a more permanent platform for outstanding longform podcasts. Whilst audio podcasts can be great, we feel it is too easy to be distracted when listening to them. Our curated transcripts make it easier to follow important ideas and highlight key points. In a world of digital distraction and ever shorter attention spans, we are proud to provide a more reflective platform for important ideas.

In this issue we present full transcripts from six longform podcast interviews, and edited highlights, or 'Podcast Bites', from a further four episodes. We cover three broad categories of content: :

## **How to improve society:**

Ray Dalio on history's lessons for potential great power conflicts  
Sylvia Earle on ocean exploration and sustainability  
Parag Khanna on migration, openness and assimilation  
Steve Killelea on trends in global conflict and peace  
Theresa May on improving political processes

## **Frontiers of knowledge:**

Luca Dellanna on brain science, heuristics and feedback  
Avi Loeb on evidence of potential extraterrestrial visitors  
Robert Putnam on social capital and interpreting societal trends

## **How to improve yourself:**

Tyler Cowan on books – reading, learning and gifting  
Ryan Holiday on the wisdom of the stoics

Each issue of *The Podcast Reader* aims to present content from the arts, entrepreneurship, history, public policy and science. In short, a cross-section of ideas that shape our world. Reader feedback is essential to help us learn and improve, so please don't hesitate to share your thoughts about the magazine at [hello@podread.org](mailto:hello@podread.org).

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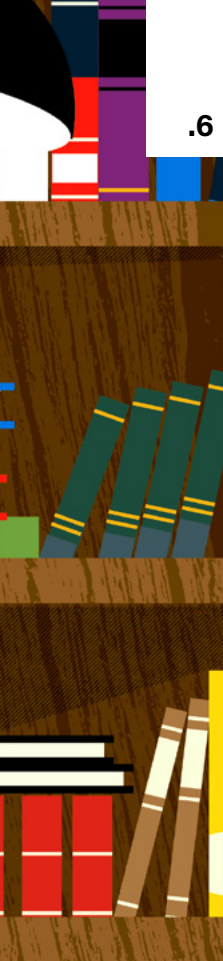
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*Illustrations by: Vaughan Mossop*







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“

We *much* prefer honest, thoughtful disagreeableness because we don't want answers as much as we want reasoning, to examine the reasoning that leads to the answers.

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RAY DALIO



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## FEATURED GUESTS

**Tyler Cowen** is the Holbert L. Harris Professor of Economics at George Mason University. He is host of the economics blog Marginal Revolution and the podcast Conversations With Tyler. His latest book is *Talent*.

**Theresa May** was Prime Minister of the United Kingdom and Leader of the Conservative Party from 2016 to 2019. She has represented Maidenhead in the House of Commons since 1997.

**Ray Dalio** is co-chief investment officer at Bridgewater Associates, the world's largest hedge fund, which he founded in 1975. His latest book is *The Changing World Order: Why Nations Succeed and Fail*.

**Robert D. Putnam** is the Malkin Research Professor of Public Policy at Harvard University. He has written fifteen books including *Bowling Alone: The Collapse and Revival of American Community* and *Our Kids: The American Dream in Crisis*.

**Sylvia Earle** is an American marine biologist, oceanographer, explorer, author and lecturer. She has been a National Geographic explorer-in-residence since 1998. She is the author of *Blue Hope: Exploring and Caring for Earth's Magnificent Ocean*.

**Steve Killelea** is an entrepreneur and philanthropist. He is the founder of the Institute for Economics and Peace, which publishes the Global Peace Index. He is the author of *Peace in the Age of Chaos*.

**Luca Dellanna** is a consultant and researcher focused on nonlinearities, complex systems and emergent human behaviour. He is the author of seven books, including *The Control Heuristic: The Nature of Human Behavior*.

**Parag Khanna** is the founder and managing director of FutureMap, a data- and scenario-based strategic advisory firm. He is the author of six books, including *Move: The Forces Uprooting Us*.

**Avi Loeb** is the Frank B. Baird, Jr., Professor of Science at Harvard University. He was a member of the Institute for Advanced Study at Princeton 1988–1993. He has written eight books, including *Extraterrestrial*.

**Ryan Holiday** is an author and host of the podcast The Daily Stoic. He is the author of eleven books, including *Courage Is Calling: Fortune Favors the Brave*.

## FEATURED PODCASTS



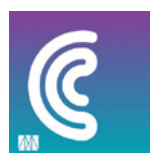
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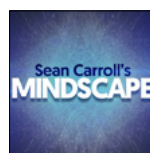
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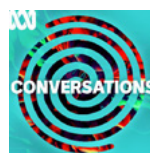
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# ON READING

## Two master podcast hosts discuss books

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### TYLER COWEN ECONOMIST

*Interview by Russ Roberts*

*Illustration by Vaughan Mossop*

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**Russ Roberts:** My guest is Tyler Cowen. This is Tyler's fifteenth appearance on the program. We're doing something a little unusual today. We're having a conversation, less of an interview, about our reading habits in response to a tweet from Noam Shapiro asking, 'How will I choose what to read? How do I read?' I thought there could be no one better to discuss that with than Tyler.

I want to remind listeners, if you read a book a week, you'll probably read about 2,500 books in your lifetime. That's a small number. So, choose wisely. How would you describe your reading habit?

**Tyler Cowen:** My basic rule is to read as much as possible. A lot of books are sent to my house. On a weekday, I might get five to ten review copies, and I look at each and every one, and I read some of those.

I love to reread classics. The earlier parts of my life, I spent a much higher percentage of my reading, reading the kinds of books that would be in the back section of Harold Bloom's *The Western Canon*. Most of those I've read, say, two to five times. Then I read what my friends write. I spend a great amount of time on Twitter, and I love to print out economics working papers and read those. I take books on trips. I just keep on reading, basically.

**RR:** Like you, I get a lot of books sent to me, which when I was younger would've been the most exciting thing I could have possibly imagined, but I'm struggling with that these days. Before I moved to Israel, I think I had about 3,000 books. I gave away about 1,000. When I was younger, I thought, 'Well, I'll get all my father's books when he passes away.' It turns out – he passed away two years ago – I didn't want any. Well, I took about 10. He had about 3,000 books. And I thought, 'Well, my kids will want my books,' but they don't. So, I don't collect books the way I did when I was younger, but it is fun still when people send them to me. And, like you, I look at almost every one, and I read a sample. Do you turn to a certain page before you make a decision?





**TC:** No. I just start at the beginning and see if it grabs me. If the author can't grab you fairly quickly, it may in fact not be a good book. Older books are quite different. They were not written to grab people up front. So, if the author's bad at that, it's not a negative signal. I don't give away many books. I'm afraid to give away books because unless I think the book I'm giving is the book in the world the recipient most needs to read, I feel I'm doing the person harm.

**RR:** Do you lend books out?

**TC:** Not very often. I don't own many books. So, I collected books in great numbers when I was an undergraduate, mostly history of economic thought. I thought I would build up this incredible collection of the great economics masterworks. But then I started moving around, I moved to Germany for a year, and I thought, 'This is not going to work.' So, what I will do – there's some economic historians in my department – if I get a history book, I will give it to them because I know they won't necessarily read it. They'll use it or not use it for reference. And I don't feel I'm tricking them into reading a book. But I would be very reluctant to give you a book, Russ. Not that I don't love you or like you, or both, but I would feel that you would feel obliged to read the book. Correct?

**RR:** Yeah. That's an awkward thing. If someone's over to my house for a meal and they see a book of mine that they like, I just give it to them; I say, 'You don't have to give it back.' If it's a book that I really care about I just buy another copy. What I used to do is I'd say, 'Oh, of course you can borrow it,' and then you never see it again. It's an amazing thing how hard it is for people to return books.

**TC:** Correct.

**RR:** And it would bother me intensely that they wouldn't return them; and I now just give it to them and I'm very happy. So, that's a great solution to this problem.

Do you write in your books? How do you take notes?

**TC:** No, I don't take notes, really, in any way. I do fold over pages if there's something notable on the page. And typically, I don't mark what was notable because then when I go back, I'll find other things. I'm deliberately randomising my second thought or search a bit.

**RR:** You're a lunatic. I bend back pages also. I do that especially when I'm reading a book on Shabbat and I can't use a pencil or pen, and then I feel good that I've bent the page back, but I almost never go

back to the bent pages. Very, very rarely. So, it's just a psychological comfort. I used to have a lot of trouble writing in books. That whole idea of highlighting was so horrifying to me. It was sacrilegious. But as I get older, I realise that I figure something out about a really hard book and I want to remember it. So, I eventually got into the habit. Now I do quite a bit, especially the underlining. I find that helpful when I go back and read a book a second time. Sometimes I do notice other things.

**TC:** I find I could read another book in the time it takes me to highlight. The next best book I haven't read is probably quite good. So, why should I highlight it?

**RR:** But, why should you read a book more than once?

**TC:** Let me give you an example. I brought books I'm reading now. Here's a book: it's called *Land, Politics and Nationalism: A Study of the Irish Land Question*, by Philip Bull. He goes through Irish land debates in the nineteenth century. I read about two-thirds of this book. I'm going to read most of it again, but only after I've read other books about Irish land history. So, to reread it twice in a row makes no sense. To read it again 10 years from now for me makes no sense. I like to read books in clusters. Much of what Bull says will have much more meaning to me after I've read four or five other books on the nineteenth-century Irish land question. That is how and why I'm going to reread, say, at least two-thirds of this book.

**RR:** Talking about the classics – books you say you read two to five times – when you read those again it's not a clustering thing. Why are you doing it? Is it comfort?

**TC:** Those, you want to reread after many years. So, Tocqueville, Plato's *Republic*, Adam Smith. The very best books, as you are older and know more, they become very different for the most part. I think they become much better. It's very hard to just read them and absorb it all. I don't think you should finish and then start again. You should read a chapter, then reread that chapter, and reread as you're going along. But those are, in my view, the books with the most wisdom, the ones that are most important to read, to study, to talk about with other people – Shakespeare – the list is mostly obvious, right?

**RR:** You don't take notes. So, how do you remember anything you read? Do you just have a great memory? I know you have a great memory, but you just rely on that? You just hope you remember, and the second or third time it gets a little bit richer?

**TC:** I have a good selective memory, but I think I



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When I was younger, I thought, ‘Well, I’ll get all my father’s books when he passes away.’ It turns out – he passed away two years ago – I didn’t want any. Well, I took about 10. He had about 3,000 books.

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remember things better by sampling them from different sources, like this book on the Irish land question. If I just reread it twice in a row, the things I didn’t understand I still wouldn’t understand; but I’m going to invest in more context, and then many more pieces will fall into place. I think I’m good at context more than I have a good memory. If you gave me a string of random numbers to remember, I don’t think I would remember them better than the median human being. I view my skill as investing in context.

**RR:** There’s a limit to what you can remember. Writing things down – some say it helps you remember it having written it down, not because you’re going to go back to it, but just the act of writing it down. What’s profound and powerful about reading clusters – books on similar topics or similar issues – is that it gets burned into your brain in a different way.

**TC:** How do you decide when to reread a truly great book or which one to choose?

**RR:** I don’t do a lot of rereading. In preparing for this conversation, I thought about books I’ve read more than once. Now, a book like *God, Man, and History*, by Eliezer Berkovits, a Jewish theology book, when I read it the first time I didn’t find any of it particularly hard, but when I finished it, I had no memory of what he’d said. So, I read it again. And, I sort of got an idea of what he was talking about. And I read it a third time.

I’m doing that same thing with a book called *On Human Nature* by Roger Scruton. It’s a set of lectures he gave. I started it, got about thirty pages in, bogged down, wasn’t sure what it was about. Struggled with it, put it down. Picked it up again, read the first thirty pages again, bogged down, struggled. The third time, I really liked it. I finally figured it out. I finally saw what he was trying to do. Some of that is that it’s a complicated book. Some of it is I read it in a hurry. Some of it is I may have been distracted when I was reading it, and some of it just I’m not smart enough? There’s a lot of possibilities for why I might want to revisit a book. But once I’ve read it that full time through, I’m not sure I’ll reread. I might reread it one more time down the road because I’ll say, ‘You know, I got something interesting out of that. Maybe I should try it again.’ But, great books that you’re talking about, I don’t reread very often. I remember reading *Zen and the Art of Motorcycle Maintenance*, by Robert Pirsig when I was a lot younger and I loved it–

**TC:** I did, too–

**RR:** And I told someone about it and she said, ‘I didn’t get much out of that. You liked that?’ So, I thought, ‘Maybe I missed something there. I’m going to read it again to see if I still like it.’ And I did. I read it a second time. But that’s very unusual for me.

I don’t read a lot of great fiction. I don’t reread those kind of books. I should, maybe. Do you reread a lot of fiction?

**TC:** The very best works I will reread a few times, Something like *Moby Dick* or *Flaubert* or *War and Peace*. Absolutely. I’ll read them three, four times but I spread it out over life.

**RR:** I read *Moby Dick* in 1964. I was 10 years old. I think that was a mistake.

**TC:** It’s one of the very best books. It’s mostly about man’s quest for God, I think, and Melville doing a kind of ideological tour of the theological universe, and that is sandwiched in between a story about chasing a white whale. There’s plenty in the book about law, and science, and America of that time, and abolitionism.

**RR:** How many times have you read it, do you think?

**TC:** I would guess five, but some parts I’ve taught and read twenty times. If I had to pick five novels everyone should read, *Moby Dick* would be one of my five.

**RR:** What would be the other four, off the top of your head?

**TC:** Let's say Proust, Tolstoy's *War and Peace*, Cervantes, *Moby Dick* and Dickens' *Bleak House*, or *Gulliver's Travels*. That would be the off-the-top-of-my-head list.

**RR:** One of the things I wanted to talk about is how you feel about people who don't like the books you love as much as you do. So, let me give you my five and then you can pick on it. But first I want to say what's wrong with your five.

So, Proust is unbearable and unreadable. I read *À la recherche du temps perdu* – *In Search of Lost Time*. I got through it because when I was younger, I would always finish a book I started: something I also learned not to do, and I strongly recommend that practice of not necessarily finishing every book. But I wasn't a big fan of that. Cervantes, I enjoyed in parts. I started *Don Quixote* a couple times, couldn't get through it. *Moby Dick*, I did read that once, 1964. What else we got?

*Gulliver's Travels*: never read it. It's a missed opportunity. I'm open to that. *War and Peace*, excellent book, loved it. I would like to read that again, because I did not like *Anna Karenina*, and that would be my least favourite famous book that most people love.

But, my top five would be *The Brothers Karamazov*, by Dostoevsky. *Soldier of the Great War*, by Mark Helprin. *In the First Circle* by Aleksandr Solzhenitsyn. I would pick *Our Mutual Friend*, by Dickens, which is just my personal favourite.

**TC:** That's very good and underrated.

**RR:** I'm blanking on my fifth. Those would be my top four, for now. They're different than my top four when I was younger. I would've put Thomas Wolfe in there, probably some Robert Penn Warren, Robertson Davies. I still love them, but they wouldn't make my top five. And part of it is recency bias. I read them a long, long time ago, so it's hard to know.

**TC:** I would agree that I don't love *Anna Karenina* as much as many people do. I prefer Tolstoy's short fiction.

**RR:** Oh, it's phenomenal.

**TC:** Maybe it's strange to call *Anna Karenina* 'predictable' at this point in time. We all know the book. Of course, it's predictable. But, in some way, it's less striking and novel to me than either *War and Peace* or the short fiction like 'Hadji Murat', or 'The Cossacks', or 'Death of Ivan Ilyich', or others, which I think are phenomenal.

**RR:** Do you like Anthony Powell? Snoozer.

“

... I actually spent two years reading it in German in the 1980s. I bought the whole German set. It was very slow going, but just fantastic. Maybe my best reading experience ever.

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**TC:** I haven't been able to get through it. I started it once. I suspected the fault was mine. But I didn't love it, and the opportunity cost seemed too high. But I would say: try Proust again. Language is a problem. The original English translation was not very good. Lydia Davis has done a better one. It's better translated into other languages. So, I actually spent two years reading it in German in the 1980s. I bought the whole German set. It was very slow going, but just fantastic. Maybe my best reading experience ever.

**RR:** One of my favourite forms of pretension is to remember who translates books. I think Scott Moncrieff was the standard Proust-

**TC:** Correct. It was bad-

**RR:** But that is not nearly as pretentious as reading Proust in German. Tyler, you have topped that forever. That is the most extraordinary thing. I know a lot about you, Tyler, but that kind of sets the standard. Wow. I'm impressed.



**TC:** I wish I could read French. I'm not impressed. I'm embarrassed. But it's a wonderfully comic book. It's the great comic novel, actually, and it's a study of social mores... The new Lydia Davis translation – and I just did a podcast with her on Conversations with Tyler – is much better than the older English-language translations. What's the book you're reading now, and why?

**RR:** Before we started recording, you said you've got five books that you're in the middle of. I'm in the middle of five also, as it turns out. I read twenty to thirty books a year for EconTalk. These are things I'm reading on the side. I'm reading *On Human Nature*, by Scruton; *Israel: A Concise History*, by Daniel Gordis, my colleague. I am reading *After Babel*, by George Steiner. George Steiner is really a fantastic thinker and writer. I really recommend his book *Errata*, a memoir. It's just full of interesting ideas. I'm reading *Invisible Man* for EconTalk. I'm also reading *Why We Are Restless*, by Storey. That's a possible EconTalk book. I'm enjoying it. I like having a lot of books open on my Kindle. I like going into them and trying them.

**TC:** See, I don't like Kindle. To remember things, I try to remember visually where it was on the page. And that helps me remember the fact. I can't do that for Kindle. It's all the same page somehow.

**RR:** That's interesting. So, you don't read anything on the Kindle?

**TC:** When I travel I have to, and I can deal with it. But I never prefer it. Let me tell you what I'm reading. The main thing I'm reading is a new book, review copy, *Adventurer: The Life and Times of Casanova*, by Leo Damrosch, which is a book about eighteenth-century Venice, the Enlightenment, Casanova himself; and it's wonderful. I'm a big fan of Damrosch. All his books are very good. There's a new one. I'm going to read the whole thing.

**RR:** Okay. What else is in your pile?

**TC:** I have a fiction book, which is very slow, by Elizabeth Bowen, the Anglo-Irish writer, *Eva Trout*. It's her last book. Wonderful prose. It is like molasses reading it, but it's partly slow because one enjoys it, and that I will read very slowly and take on my trip, and it's not too long and not too heavy. So, that's a perfect book for a long trip. Elizabeth Bowen, to me, is one of the great underrated fiction authors. *Last September* is a fantastic book, though I had to read that twice in a row to really absorb it. Took me a long time.

Then I have this book in Spanish that I might quit by Eric Zemmour, who was running to be the next

leader of France, he wrote a book available only to me in Spanish, though he wrote it in French, called *El Primer Sexo*. It's about the feminisation of society. It's mostly long and rambling so I might stop it, but it's good Spanish practice. The notion that a major candidate for a leadership post in a major country would write a whole book on the feminisation of society seems to me noteworthy.

**RR:** So, wait a minute, Tyler. You read in German, Spanish, English.

**TC:** I'm always reading something in Spanish and German at any point in time, but very slowly.

**RR:** That'd be good for travel. Take you a while to get through it. You wouldn't have to take as thick a book.

**TC:** There's this book by Thomas Bernhard called *The Voice Imitator* – *Der Stimmenimitator* – which is short stories that are only a paragraph long and they're in German. And every now and then I read three or four of them.

**RR:** Do you like short stories?

**TC:** Mostly I prefer novels, but in foreign languages; they're easier. They're shorter by definition, and I feel I understand them better in other languages. Somehow in English I'm impatient with them in a way that I'm not with a novel.

**RR:** Do you like William Trevor?

**TC:** I like him. It's actually on my Kindle because the collected short stories is so big to carry around. But I don't love it. I would much rather read a novel by Elizabeth Bowen, say.

**RR:** I really like William Trevor. He wrote both novels and short stories, but I think his main gift was the short story. I think he's fabulous. Mark Helprin writes both great novels and great short stories.

**TC:** My copy of Helprin has arrived, because you told me to buy it last time we spoke, *Soldier of the Great War*.

**RR:** I think you'll like it. It'll make you want to go back to Rome, maybe. If you like it, try *The Pacific*, which is a short story collection. I like every one of his short story collections. I don't love all of his novels, but I love at least three of them a great deal. They're some of my favourite books. I think *Winter's Tale* is a great book, also.

**TC:** Bookshops. What's your bookshop policy? Where do you go? Where are the good ones? Do you just use Amazon?

**RR:** Well, I used to spend an enormous amount of time in bookstores. I spent an enormous part of my youth just wandering in bookstores. It'll always be nostalgic for me to be in a bookstore, especially a great used bookstore. I used to love to go to the Strand in New York. Here in Israel, in Jerusalem, there's a ton of fantastic used bookstores with English books, but one of my favourite bookstores ever is a bookstore here in Jerusalem called Adraba. It's tiny. It has an English book section of about two large bookcases – and virtually every book in those bookcases I've either read and loved or want to read; and they're all beautiful.

**TC:** So, with someone who reads more than average, I know giving advice is hard. It depends on context, but what is the thing you would wish to tell your audience that you feel you know about books or how to read that maybe they don't. If you had to boil it down?

**RR:** Don't finish every book you start. Take notes in your books – which you don't agree with, but I think it's very useful.

**TC:** I think it's good for most people. In that sense, I agree.

**RR:** I guess the other thing I would say is to take them seriously. I can't tell whether we're in the golden age of books or the death of books. It's an extraordinary thing to be able to access Amazon and buy, 'any book you want'. I mean, when I think back to my youth and relying on libraries or a bookstore – you know, when Barnes & Noble came along, it was so exciting. It was just the biggest candy store of all time for a reader. I loved it. And then Amazon just crushed them – built a much bigger bookstore. And I loved wandering. I love wandering at Amazon, online. I think it's beautiful.

But the advice I would give is to take it seriously. I think reading is a little bit out of fashion. In some sense, that's misleading because I think a lot of people read online. They just don't read books. They read articles and essays and all kinds of things. But there's something deeply precious about the opportunity to spend 10 hours or so with an interesting mind, and you're at their mercy. They've laid out the book in the way they thought was best to capture what they wanted to say and you get to experience that. It's not to be taken lightly. It's a precious human thing that people write books and read them.

In a way, we both probably read way too much. I skim some books. But, to immerse yourself in a book is one of my favourite things.

**TC:** I would agree with your points. These are maybe squirrelier recommendations – but first: read in clusters. So, read a bunch of books on the Irish land question. Any one book you read on that topic, you are not going to retain, unless you're exceptional with your memory. But if you read four or five books on that topic, even if you only read parts of them, you'll know something about it.

My other advice would be: picture books are greatly underrated. So, if you want to learn about Venice, Italy, one thing you could do is go to Amazon, type in Venice, read a book on the history of Venice. I mean, that's fine. But if you just go to your public library and pull down a picture book on Venice, most people will actually learn more doing that. It will have a lot of wonderful photographs and maps, and it will be very much to the point. It's probably not partisan, not trying to push some kind of very particular line, not post-modern: just a book about Venice. People don't do nearly enough of that, in my opinion.

If you read picture books about animals, about science, you'll probably learn more than if you do what most people do. I think most of us – I know it's true for me – don't spend enough time on YouTube. YouTube is in many ways becoming more potent than books. So, evaluate your YouTube consumption and see if you could improve it, would be another tip.

The simplest point that I would stress above all else – don't read stuff you don't love reading. The point of reading is that you love what you're reading. If not, don't do it.

**RR:** Do you ever read children's books or young-adult fiction?

**TC:** Not very much. I read *The Hunger Games* and some of the sequels. I quite like those. People give or send me a fair number of those books. I think they're good. They're just not my priority. And true children's books, like for four-year-olds, I pretty much never read.

**RR:** I have a love of a book called *The Seven Silly Eaters*, which I really like. It's a children's book. And a book called *The Gardener*. These are picture books. These are written to read out loud to a six or seven-year-old. I find them often quite moving. The illustrations often enhance. There's a wonderful book by Robert Cormier called *I Am the Cheese*. It's one of the scariest books I've ever read. It's written for teenagers. It's a phenomenal book. I'm a big fan of *Winnie-the-Pooh*.

**TC:** Those are good. I liked *Encyclopedia Brown* when I was 10. I read a lot of chess books, a lot of books on cryptography.





**RR:** What's your favourite chess book?

**TC:** Alexander Kotov, *How to Think Like a Grandmaster*, which is still a wonderful book for learning how to do almost anything.

So, it encapsulated a lot of the wisdom of the Soviet School of Chess – how they trained people to become better. And the way you become better is by doing exercises with actual feedback that might prove you wrong. So, try to annotate a chess game and then compare your ideas against – then a grandmaster, now it would be a computer –and that's much better than just playing through games or staring at the board. So, that's a fantastic book even if you're not mainly a chess player.

**RR:** Are your parents readers?

**TC:** My grandmother was a big reader. Her favourite authors were Shakespeare, Victor Hugo and John O'Hara. My father didn't read that much. He ended up actually reading 'The Freeman' from Foundation for Economic Education, which he brought home to me when I was, like, 11, 12. And I started reading that. So, that was important. But he didn't read that

many books. My mother ended up as a reader. She would read books like Jonathan Livingston *Seagull* – popular, smart, maybe vaguely spiritual books, smart or self-help books, books on psychology. And I read a lot of what she had around when I was young, say 11 or 12. That was a good influence for me, just to think about people in a better way.

**RR:** Did she try to get you to read books that she loved?

**TC:** I don't think so. I always read more than either of my parents did. My grandmother gave me some useful tips and I would talk to my parents about what I was reading. And my mother was great. She would always take me to the library. So, even in Carney, where I grew up as a kid, there was a Carnegie library. My mother took me there, say, when I was three. I was reading when I was two. I watched my grandmother teach my sister who was two years older than me. Picked up reading very early. I think my first favourite book was by Leonard Kessler, who just died, and it was something like *Mr. Pines Paints a House*, and it's a kid's book, but that was my favourite when I was three.

**RR:** What I find interesting is that most of the books that my grandfather and father – who were the big readers of my life – loved I didn't love and struggled to read. My dad liked Sir Walter Scott. His father liked Sir Walter Scott. He liked Thackeray. They both read a lot of Shakespeare, a lot of Macaulay and English history. I've never read Macaulay. I don't enjoy reading Shakespeare. And Sir Walter Scott I struggled to read.

**TC:** I liked Scott much better than when I was younger. I read some to prep for Niall Ferguson and really liked it. That's an example of going back to a classic.

**RR:** A good example would be *Jane Eyre*. *Jane Eyre* is incredibly entertaining. One of my kids had to read it, and I hadn't read it since I was 15; and I just thought, 'Oh, my gosh! It's so good. The writing is so good.' But, most of the books that I love, my kids don't love. Most of the movies I love, they don't love. And the common denominator there is pace. They want faster. One of my favourite movies is *High Noon*. It's glacial. One of my father's favourite movies is *Remember Mama*. We can't watch it. It's too slow. I just wonder if the next generation will read *Don Quixote* and Dickens. It's hard to believe that they won't.

**TC:** Jane Austin and Shakespeare seem much more popular to me now than when I was a kid. Russian fiction seems much less popular. Doesn't make sense to people. 'What's all this angst about? If there's no God, isn't everything evil?' and so on. It's sort of like something from a bad Woody Allen movie. When I've reread Dostoevsky, it hasn't clicked for me. When I was in high school, *Brothers Karamazov* was my favourite novel of all time. Just soaked it up, loved it. I went back to it – I don't know, seven years ago. I could see the point, but it didn't grab me.

**RR:** My wife and I tried to read *Crime and Punishment* together, and we couldn't get through it. I'm sorry to say. We got about halfway through.

**TC:** What do you think of Dickens these days other than *Our Mutual Friends*?

**RR:** I love Dickens. I just love Dickens.

**TC:** He's held up very well, I think.

**RR:** He's a brilliant storyteller. He has a tremendous sense of humour. He's a great plotster. He plots beautifully. His characters are vivid beyond vivid. I've probably read, I don't know, ten. But I have to confess, Tyler: I've never read *Bleak House*.

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If you're trying to understand, say Russia attacking Ukraine – I think fiction often does you better than to read political science and international relations.

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**TC:** Oh. That I would give you a copy of.

**RR:** *Great Expectations*, which is deeply flawed, I think, but there are so many scenes in that book that are just magical. The characters – I miss them. When things happen to them, I feel bad. They're wonderful. Joe Gargery. Gosh, I'd like to spend an evening drinking with him in a pub. He's great.

**TC:** But, there are books young people read that I find much too slow. So, I can't really get through the *Harry Potter* books.

**RR:** Yeah. I read them a long time ago.

**TC:** *Game of Thrones*, either on TV or in the books, I can see the appeal. I'm just not sure at the end of it all what I'll have; and I stop reading, stop watching.

**RR:** What about humor? Do you read funny books?

**TC:** Only Proust. Most books to me aren't funny. I just don't absorb the humour. Something like Wodehouse or these British writers that are supposed to be so funny, I see that they are, but they're not funny for me. YouTube is funny. TikTok can be funny. Larry David can be funny. Books to me just aren't funny.

**RR:** I'm sure you know, Tyler, and I know my audience know, that Adam Smith points out that we care more that people hate what we hate than that they love what we love, but I do love, I've read a lot of, Wodehouse.



**TC:** I think it's good. It's just not funny for me. It's like a period piece – of interest.

**RR:** Okay. My top three comic books would be anything by Wodehouse that has Jeeves in the title, though my favourite is a book called *Joy in the Morning*. What about *A Heartbreaking Work of Staggering Genius* by Dave Eggers. Have you read that?

**TC:** I quite like it. I think it's very good. I've been disappointed with him since then, but an excellent book.

**RR:** We're on the same page there. But that book is one of the funniest and saddest books I've ever read. I think the comic set pieces in there are just genius. He's a phenomenally funny person.

**TC:** Why isn't YouTube just always funnier than any book?

**RR:** There are things that are funny on YouTube. I think there's something special about comic writing. It's a different thing. It's like saying, 'Why would you eat French food when you can eat Tex-Mex?' They're just different.

What books changed your life, Tyler?

**TC:** Many, many books. So, all the early chess books I read got me playing chess, which was a formative experience for me. Reading Ayn Rand, *Capitalism: The Unknown Ideal*, was a big thing for me. I never loved the long novels or even a lot of the philosophy, but reading her on capitalism; Hayek, Mises, the Austrian School of Economics in general – I'm an economist so that's been my life. And those are books I read when I was 13, 14 years old.

**RR:** But you read so many things outside of economics. Surely, there's some other books besides chess and economics that have had a big impact? Anything come to mind?

**TC:** Well, Derek Parfit, *Reasons and Persons*, which I just discovered in a Harvard bookstore in 1984 – I had never heard of it, never heard of him. It's a philosophy book. I don't know that it makes sense to read the whole thing now because it has been absorbed, and you can read how it's been absorbed. But that book definitely changed my life. *Stubborn Attachments* came out of reading Parfit.

Reading Quine and the American Pragmatists and philosophy, reading Plato, reading *Moby Dick* – just books encouraging me always to think more broadly and to think about the role of narrative in society, to think: what do people really care about? How are people actually motivated? If you're trying

to understand, say Russia attacking Ukraine – I think fiction often does you better than to read political science and international relations.

**RR:** What fiction would you recommend?

**TC:** Well, *Moby Dick* would be a good example because it's an obsessive quest. Believing in some screwed-up idea very badly and wanting to see it through. Or Tolstoy for that matter – just Russian fiction in general. The ways in which that culture can produce irrational behaviour. You learn that better from fiction, I think.

**RR:** That's interesting. It's funny: you mention Ayn Rand. I've become less enamoured of Ayn Rand as I've gotten older. But you remind me that when I was 17 and read it for the first time, I was just overwhelmed. I think I read *Anthem* first – the very, very short novella. And it just set me on fire. And, again, I moved away from it in many ways. There are many, many things I don't like about her worldview. But, boy could she write a story.

**TC:** I think *Atlas Shrugged* in particular – it was highly prophetic, and it's underrated as sociology. Her cocktail party scenes, her account of what we now call 'the woke.' It's what? Published in 1958 or around then? And she saw this in the 1950s. She so nails it. I think better than any critic writing today. And there are a lot of critics of 'the woke.'

**RR:** Yeah, that's true.

**TC:** On that, she was so perceptive. So, simple ideas about capitalism being highly productive and moral and supporting virtue – to me, that's great. I think she is too one-sided on that. But, relative to the current discourse, a much-needed corrective. I never loved *Fountainhead*, but I think particular scenes in *Atlas Shrugged* are still golden and remarkable. You have to read them this year to understand how good they are.

**RR:** Yeah. The first hundred pages is such a tour de force of storytelling. Forget the philosophy and the economics. It's hard to put down. It's a really good book. But it is 1200 pages. I think it's the longest book I've probably read, if you don't count *Gulag: Archipelago* or multi-volume books.

**TC:** Long books have impact, even today. Piketty. *Harry Potter*. Many examples.

**RR:** It's a bit of a puzzle. Right?

**TC:** It's a world you get absorbed into. And it's a kind of totem and a signal of absorption into a culture that

people share. And if the entry fee is too low, the value of club membership is diluted. So, I think it makes sense and looking at it with economic reasoning.

**RR:** So, I made a list of books that I thought changed me. I thought *Anarchy, State, and Utopia*, by Robert Nozick, which I have not gone back to, but it had a huge impact on me.

**TC:** Great book.

**RR:** *Fooled by Randomness*, by Taleb – it was the beginning of my obsession with being deceived by numbers and the challenge of thinking about uncertainty. I don't think I'll ever lose that fascination.

**TC:** Excellent book.

**RR:** There's this book by Adam Smith, not *The Wealth of Nations*, but *The Theory of Moral Sentiments*, which also was an eyeopener for me. And then – I'm going to list an author who's totally forgotten, who had a huge impact on me when I was younger – and that's Robert Ardrey. Have you read Robert Ardrey?

**TC:** I don't think so. What did he write?

**RR:** He's great. He's a playwright. And then he got into the kind of books I hate now, which is like a theory of everything. His first book, I think you've heard of. It's called *African Genesis*. The theme of it was very simple. It was that we came out of Africa – humanity – not out of the Tigris/Euphrates area. And, we were violent.

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But I never read science fiction. And the reason is simple: my dad didn't like it. All of my reading when I was younger was an attempt to earn the respect of my father.  
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**TC:** Oh, that book, yeah.

**RR:** I thought you'd know it. But he wrote a second book called *The Territorial Imperative*, which was another amazing book.

**TC:** Okay. I read that as a kid.

**RR:** Then the third book he wrote was called *The Social Contract*, which I'd love to go back and read. When I finished that book – it was 1976, I was 22 years old – I remember being so overwhelmed by how that book opened my brain. I don't even remember how. Doesn't matter. But I thought, 'This is what I want to do. I want to write a book like this.' It didn't change my life in the sense that I created a worldview out of it, but it made me realise what a book could do. And it just was a beautiful thing.

**TC:** Has science fiction affected you much? Because it was a huge influence on me – and still is.

**RR:** Now, I want to talk about that in a sec, but I've got to mention first, have you read *Worlds in Collision*, by Immanuel Velikovsky?

**TC:** As a kid, I did. I was like, 'Oh, my goodness!' It seems to be wrong, but it made an impression on me – What about Erich von Däniken?

**RR:** I didn't read him.

**TC:** It seems he was quite nasty. And wrong. But again, when you're 13, you imbibe these things.

**RR:** I was about that age when my dad gave me a book called *The Passover Plot*, which was this fantastic attempt to explain the facts of Jesus' life as a conspiracy. I mean, it's just this fabulous work. You read those books, especially when you're younger – you're not very smart – and you go, 'Oh, my gosh!' and you realise you've been led into this secret truth, this conspiratorial unveiling that you have access to. No one else knows. No one else knows that we're apes that are murderers. It's those kinds of books.

**TC:** I think *Robot* by Isaac Asimov might go down as the most influential book of the twentieth century. Not counting something like *Mein Kampf*, which is a very different direction. It's about artificial intelligence and how you would govern it with laws. And Asimov also had studied the Torah. So, the laws for the robots, they were kind of running satiric commentary on--

**RR:** Jewish law?

**TC:** Yeah. And the robots failed to obey the laws in all



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When I finished that book ... I remember being so overwhelmed by how that book opened my brain. I don't even remember how. Doesn't matter. But I thought, 'This is what I want to do. I want to write a book like this.

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the same ways that the humans don't obey the laws in the Torah. So, it's theology, too.

**RR:** Science fiction is a huge hole. The list of books I've read that you haven't, if we cheated and included not-good books, I read a lot of mysteries when I was young: Robert B. Parker. And then I went through a whole set of British mystery writers. I read hundreds. It's the equivalent of playing chess online. It was a compulsive distraction from life. But I never read science fiction. And the reason is simple: my dad didn't like it. All of my reading when I was younger was an attempt to earn the respect of my father. And science fiction was not on his list; and so I didn't read any. Any science fiction I've read I've read as an adult. I don't like fantasy either. I don't like Tolkien. What science fiction should I read?

**TC:** Start with *I, Robot*, I would say. Try Olaf Stapledon, *Last and First Men* from the 1930s. He was a Neo-Hegelian philosopher who sketched out how he thought the world was going to evolve. If I get together, say, with a tech crowd, the books that everyone has read – it's some mix of Tolkien or *I, Robot* – not the Bible, not Charles Dickens. Not Proust. But everyone has read those books, or almost everyone.

**RR:** Interesting.

**TC:** Massively influential. I love Tolkien, even though most fantasy I don't like. *Once and Future King*, by White, I think is a fantastic book. I would recommend you try that. I'd be willing to give you that book, even.

**RR:** I think I would like that. I've not read it. Do you have any holes? Do you have things you don't read, genres that you've missed out on?

**TC:** Mysteries and crime. A lot of the best-known authors, I've read one book by them, and I typically think it's good, but I'm not interested in reading another. It feels like an act of repeat. So, I wouldn't say I haven't read in that area, but there's no author I'm well-read in. Romance novels of the non-classic sort, which are a pretty big chunk of the book market, I've hardly read. I've read a great deal of what you would call classic African-American literature, but popular African-American literature I don't think I know well at all.

**RR:** You read so widely in non-Anglo stuff. Most of my reading is overwhelmingly British and American. So, I have giant holes, outside of a sprinkling of Russian novels that I read when I was younger, a few French novels when I was younger. Do you like Flaubert?

**TC:** I certainly like him a great deal, but he feels a little overrated to me. I don't quite feel the passion.

**RR:** Balzac?

**TC:** Very solid, underrated now. As a whole, he painted a portrait of French society that is important and interesting.

**RR:** Hemingway?

**TC:** Short fiction, above all. The classic novels, they seem dated to me.

**RR:** Me, too. My son is reading him now, and he's loving him, which shocks me. I read them all when I was younger, too; but they don't hold up for me. I would never want to go back and read *A Farewell to Arms* or *Sun Also Rises*, but his short stories are still, I think, very good.

**TC:** How about Faulkner for you?

**RR:** I took a class in college on Conrad and Faulkner because I loved Conrad.

**TC:** Yeah. Two of the best for me.

**RR:** By the way, my other confession: I've never read *Ulysses* by James Joyce, or *Finnegans Wake*. Have you read either one?

**TC:** Now, *Ulysses* has to be in my top five, if I can put in seven. *Finnegans Wake*, I've looked at every page. I wouldn't say I've read it.

**RR:** I have a friend who says you should work your way through it. To me, it's the worst cryptic puzzle. I don't do cryptic crosswords. It's a thousand pages of a cryptic crossword. It's a cruel, cruel book.

**TC:** I don't think you can solve it. It's a very long poem. It comes across as tedious. But I suspect it's very good along some dimension I don't care about much. *Ulysses* is easy. And fun. That, you should pick up. That, I would give you. I would give you my copy.

**RR:** So, we've talked a lot about fiction. Let's go back to non-fiction.

**TC:** Just one thing to add. *Ulysses* intersects with a lot of your interests – Judaism, cosmopolitanism, what it means to be human. It's definitely a book you should read.

**RR:** But let's talk about non-fiction. What are some of your favourite non-fiction books? I'm going to ask in two categories: history, and then the non-fiction books like *Foiled by Randomness*. Got anything that you love in there? I'm sure you have many.

**TC:** I love non-fiction books less than I used to. I find what sticks with me are methods and ideas and tools for approaching problems – like economics. Clearly, I've learned a lot of the economics I know from books. But, it's not fundamentally a book thing. And, most non-fiction books as books, I'm maybe a little disappointed in, and there's not that much I could name. There are a great number of wonderful history books. Braudel I was talking about yesterday. I like classic works that are not fiction, but they're not quite non-fiction either. Like, what would you call Plato's *Republic*, right?

**RR:** Philosophy?

**TC:** Philosophy. It's non-fiction in a sense, but it's not classic non-fiction. Boswell's *Life of Johnson* would be

one of my favourites, which by the way is part-fiction.

**RR:** I have trouble reading that.

**TC:** It's the small group theory: how small groups can have amazing dialogues and how that propels them forwards. But a lot of it's made up.

**RR:** How about Montaigne, the *Essays*? Did you read them?

**TC:** Yes. I have a very high opinion of them. I've gone back to them. They just seem a little slow for me right now. But they haven't gone down in my eyes. I think they're pretty amazing, and he's ahead of his time, still.

**RR:** Oh, my gosh! He's such a modern. That part of it is so fascinating to me.

**TC:** Humane in some very deep way and a big influence on Smith. I would say better than Smith, actually.

**RR:** Are you a Robert Caro fan?

**TC:** I love the Moses book. The LBJ (President Lyndon Baines Johnson) books, I've started. I thought they were amazing, but I ended up saying, 'I could just read the Wikipedia page and end up knowing the same things,' because I don't need to know the details of how he bribed his way through Texas State government; and I didn't read further, but they're incredible.

**RR:** I think that's a missed opportunity. As a portrait of ambition – ruthless ambition – I think it's unparalleled. I say that having stopped – I think I only got through the first three volumes. But I loved them when I was reading them. I think they're extraordinary. They're a portrait of America. They're not a portrait of LBJ. They're an incredible achievement in my mind. I'm going to mention one of my favourite books, which is Churchill's *The Second World War*. Have you read it?

**TC:** I have never read it. I think I've read snatches of it. It's beautiful prose.

**RR:** It's incredible.

**TC:** But I don't trust the narrative.

**RR:** Oh, of course not.

**TC:** I love the Victor Davis Hanson book on World War II. But, it's like you don't want to watch certain documentaries because you know they'll skew you,



and Churchill on World War II strikes me as a bit like that.

**RR:** It's so good, though. In the back of every volume are all the memos he wrote. They're phenomenal. They're so great. He's such a good writer. He's just a beautiful stylist.

**TC:** I don't read books of letters much. There's a few I quite like, but do you love reading letters?

**RR:** Not at all. You mean, like, the letters of so-and-so?

**TC:** There are exchanges between Robert Lowell and Elizabeth Bishop, who were two poets.

**RR:** Well, that's worth thinking about.

**TC:** Those are very good. There are some other examples, but mostly letters, the action unfolds too slowly for me or it's too much superfluous information.

**RR:** Yeah. Yeah. Not my thing. Nabokov?

**TC:** Fantastic.

**RR:** You have a favourite?

**TC:** *Lolita* is hard to read. When you read it from a current vantage point, you see just how brutal a story it is.

**RR:** It's horrible.

**TC:** And it's almost unbearable. Many are excellent. *Pale Fire* would be, like, a top twenty fiction work for me. *Pnin*. But, again, many others.

**RR:** What a stylist. Incredible.

**TC:** Top mind. And writing in his second language, maybe it was even a third language.

**RR:** Do you have anything else you want to ask me?

**TC:** How much do you feel obliged to read the books of your friends? You have a lot of friends who write books, right?

**RR:** You talked about non-fiction being overrated. I do tend to believe that most books are just a good journal article, magazine or essay that got flushed out into a book. I'm often disappointed. An example of a counterexample of that: I remember when I read Bryan Caplan – my former colleague, your current colleague – his book, *The Myth of the Rational Voter*.

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... most non-fiction books as books, I'm maybe a little disappointed in, and there's not that much I could name.

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There's an interesting idea on every page. It's full of interesting stuff. So many books aren't like that. One of my favourite books is Arnold Kling's *Three Languages of Politics*. It's short. Every page is also good. So, many books – many, many pages don't speak to me and don't give me anything. Taleb would be the opposite. He's a brilliant storyteller. I like almost every page there. So, when you ask me, 'Do I read the books of my friends?' I'll tell you, I'm going to confess. No. How about you? You also have a lot of friends who write books. Do you read them all?

**TC:** If they give me copies, I will read it. But it's striking to me – the book I just finished writing called *Talent* with Daniel Gross, my co-author – I read remarkably few books to write that book. I read a very large number of articles. And this is maybe getting back to my view that books are overrated. I don't think there are many great books to read on understanding talent other than just trying to absorb some very large corpus of knowledge about human achievement. You know, Dean Keith Simonton would be a counterexample. Gladwell's *Outliers* is quite interesting. There are books you should read. But I think more and more, the idea – you learn methods, you read in clusters, you don't obsess over single books, you try to read on a project you're working on so you have context – that those are the best ways to read. I think I'm now believing more firmly than before.

**RR:** Interesting.

**TC:** What would be your summary statement of where you're at, at the moment, on reading books?

**RR:** I miss my youth. I miss curling up with a book for a whole day and reading an entire book – cover to cover, in a sitting. I can't do that anymore – for a lot of reasons. My old joke used to be: When I was younger I read a book a week; and then when I had children, I read a book a night: they just had more pictures. And now I'm back to reading a book a week. But it's usually for EconTalk. Occasionally I regret a choice. But often I learned something, almost always I learned something. But I miss that immersion, just like I miss graduate school when I could sit for four, six hours and just think through a problem and write stuff down. As I get older, my memory – I think I was blessed with a very good memory. It's not what it was. I can feel it. But the compensation is, is that because I've read more stuff than when I was younger, I see connections that I couldn't see. And that's very precious to me.

When I read a book now and I see its connection to something else I understand or read or I pull out a narrative or an anecdote or a story and I piece it together with something else, that's just the deepest kind of pleasure. I just love that. But what I miss is that lost-in-a-book feeling, which is hard for me now. I have more going on in my life. I'm older. I'm less able to concentrate for long periods of time because I spend too much time on YouTube and chess.com. And I miss that.

But, overall, it's pretty good. And I would just say – today is the second anniversary of the passing of my father, who was an enormous influence on me. Books remain a great connection for me with him now that he's gone. I still read things that I think, 'Oh, I could share this with my dad!' But it's still okay that he's still part of me. So, that he's not here physically isn't so important in a way. I miss him, but the fact that I can't show him a passage in a book is okay because his son's reading that book. It's part of him. He's not gone that way, completely. Have you read *Sum* by David Eagleman?

**TC:** I don't think so.

**RR:** Can I give you a copy?

**TC:** You can. I'll read it, too.

**RR:** Okay. It's real short. It's a magical book. It's phenomenal. He's a neuroscientist. I've got nothing else to say. Do you want to add anything?

**TC:** I would add I view Chinese fiction as a big open missing area for me. I've tried a fair amount. It's just hard for me to make progress. I'm really grasping it

and its context, and I will read your next book, Russ.

**RR:** You already have, Tyler; but what you don't know is that it's much better than when you read it before.

**TC:** I'll reread it and then I'll read your next book after that.



**EconTalk**

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# WALKING THE TIGHTROPE

## Two female Prime Ministers discuss politics

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### THERESA MAY

A PODCAST OF ONE'S OWN

*Interview by Julia Gillard*

*Illustration by Vaughan Mossop*

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**Julia Gillard:** It is my great privilege to welcome the Right Honourable Theresa May. She's only the second woman to serve as UK Prime Minister as well as the second woman to hold the post of Home Secretary – a role she held for longer than anyone else in more than 60 years. Theresa and I are going to have a conversation about life and being women in politics.

You've been passionate about politics for almost a lifetime. You got the political bug when you were 12 or 13 and decided that you wanted to be a Conservative Member of Parliament. That's a little bit different to my journey. It took me more time to work out I wanted to go into politics, but our careers, in some ways, have been the same. Yet, at the end of being Prime Minister I decided to exit Parliament. You've decided to stay. Can you explain that decision and what more is it that you want to achieve as a parliamentarian?

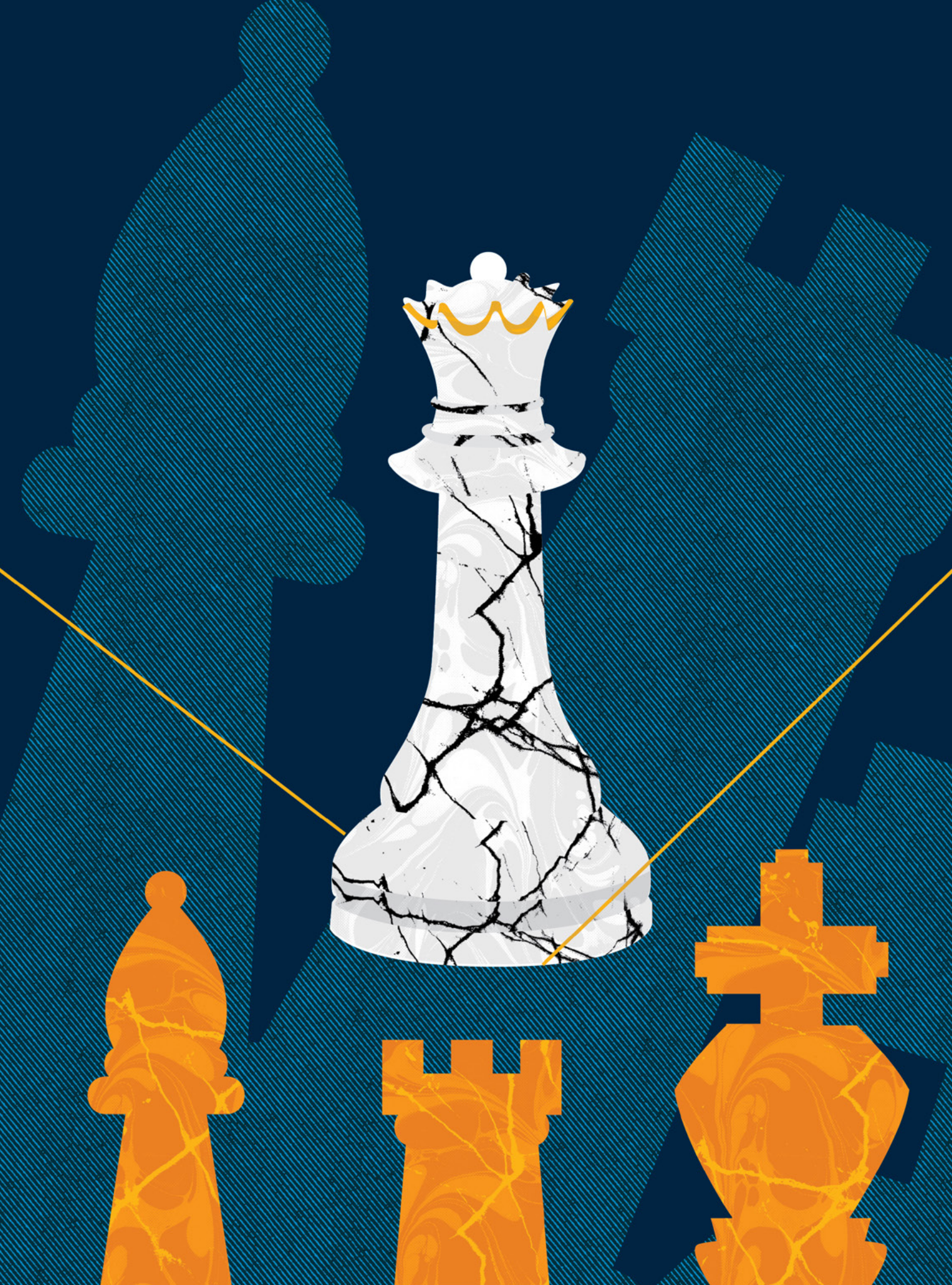
**Theresa May:** I suppose in a sense, it is unusual for a former Prime Minister to stay on. When I went into the House of Commons I was put on the front bench a year after I was first elected. I was in the shadow cabinet two years in going into Parliament. So, for the

vast majority of my time in the House of Commons, when I came to step down as PM, I had been, if you like, at the top level.

I've always really valued the constituency part of the job of being a Member of Parliament. I'd only been on the back benches for one year. So, actually, it's given me the opportunity to be on the back benches, to contribute to Parliament in a different way. To choose the subjects I want to speak on rather than having to speak on certain subjects. And it's given me the opportunity to see through some of the things that I started as Prime Minister and still wanted to do. For example, the Domestic Abuse Act, which I started to work on, and that is now on the statute book. I'm waiting for the new Mental Health Act – we need a new Mental Health Act to come through. But there are still things in Parliament that I want to achieve and I'm able to focus on some issues rather better than you can do when, as you know, you're Prime Minister and you've got to do the whole lot.

**JG:** Let's talk about some of the policies and big changes that you made in your political journey in the many roles you played, including as Prime Minister. But I want to start really at the very beginning. You put yourself forward for pre-selection on multiple occasions before you were selected for a seat. I did the same, took me ten years to get pre-selected and one failed senate attempt. I know what that feels like. You've said publicly that when those rejections happened, you said to yourself, I'm not going to take this in the spirit of thinking it's because I'm a woman, I'm going to use the feedback to improve







my performance. But when you had the power in your hands to make a difference when you were chairing the Conservative Party, you actually got in an independent psychologist to look at the unconscious biases that there were in the processes. You must have had the sense something wasn't fair for women. What was that sense, and do you think it's changed?

**TM:** Yes. I suppose just by definition, the numbers show that there was a problem with our selection process. We needed to change something, so that's why we brought in the independent occupational psychiatrist. They looked at the whole process, made a number of changes to it. What was happening was that there was a very traditional model of what an MP should be like. How an MP should be able to act. The great thing that everybody put most marks by, if you like, was a great tub-thumping speech.

You had to be able to go out there and really give it to them. Now, of course, you have to do that sometimes in politics. And women are capable of doing that, just as men are. But actually, as a Member of Parliament, you also need to be able to listen. You need to be able to stand at the school gate and hear what people are saying. And actually, by and large, women are rather better at doing that than the men.

We changed our selection process into one that balanced the different skills. We recognised that being a Member of Parliament requires a whole range of skills. And then trying to ensure that we were testing those skills. As you said, Julia, I didn't feel when I went through the selection process that it was because I was a woman. And I almost think that if you allow yourself to think that you're playing their game. It's important to look at your own performance and try and judge your own performance. But I knew of women who had really difficult times in the selection process. Something had to change.

**JG:** Playing their game in what sense?

**TM:** Well, how can I put it? If they see a woman as not capable of being a Member of Parliament, and if the woman then feels that she's being rejected because she's a woman, it somehow feeds into that image, I think.

**JG:** Right, I understand. How much do you think the bias is still there? When you do the statistics in Australia and in the UK, it is true that there are more women sent to Parliament by the Labour parties. Though, of course, the easy rejoinder here in the UK is to say, Labour has never been led by a woman whereas of course the Tories have been led by you and by Margaret Thatcher. But there's still a lesser number of women. Why do you think that is?

**TM:** Well of course, what happened here in the UK significantly in 1997, was the Labour Party took a deliberate decision of allocating certain constituencies as all-women shortlists. That got them 101 women in and that was that huge step change. I'm pleased to say we had 13 in 1997, and we've now got 88. So, we've improved but I think we would all say, on both sides, there's still more to do because the overall percentage is about 35 per cent women in the House of Commons now.

I guess from a Conservative point of view, there's perhaps more likely to be a more traditional approach and more traditional view as to what an MP should look like. But I would argue that from a Conservative point of view, we're about opportunity, we're about enabling people to blossom and be the best they can be. And actually, that should be as good for men and women. But it has taken some time and we still need to keep our foot on the accelerator.

I co-founded, with Anne Jenkin, an organisation called Women to Win in the Conservative Party, which mentors, provides training to women who are standing as candidates. Helps them, guides them through the selection process. When we founded it, we were looking for the day when Women to Win would not need to exist, but sadly it still does need to exist. And I fear it will need to exist for some while to come until we get to the genuine position where people aren't thinking, this is a woman in front of me, or a man in front of me, but this is an individual. What is their skill set? Are they going to make the best Member of Parliament?

**JG:** And in terms of how people see men and women as leaders. You famously said that the stereotypical image of a politician was a man with a wife and a Labrador. All of the stereotypical images. But if we dig a little bit deeper than that, there is something going on with images of power. We've been living through this era of very hyper-masculine populist politics. I'm thinking here of Donald Trump, President Bolsonaro in Brazil, and the imagery around President Putin and that kind of hyper-masculinity. What do you think is going on? It's clearly not all comparable, but there are democracies that are deliberately choosing that image of leadership. Why do you think that there's an attraction to that? If we're in the business of opportunity for all, how do we diversify images of leadership so it's not that one template?

**TM:** I think there is a real challenge, a problem in politics today around the world, which is this sense of, it's a world of strong men. It's a world of absolutism. Either you're 100 per cent with me, or you're 100 per cent against me. And actually, in politics as in everyday life, you need to be willing to compromise to sometimes come to the solutions that can be



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... emotion is read differently from male and female leaders. An angry man is very likely to be viewed as strong, an angry woman is likely to be viewed as hysterical. A man who's been moved to tears by a particular event is viewed as showing his compassionate side, a woman moved to tears is at risk of people saying that she's lost it...

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put into practice. I think that that absolutism may be driven by a whole range of things. There are the populist politics movement if you like, to call such, that you've referred to Julia. I think that social media plays a part in this, which has been part of what's led to a more aggressive, vitriolic debate in politics today. These things all reinforce each other. So you get to this situation where somebody who is perhaps more thoughtful, who wants to consider carefully and work out ways of putting things into place that actually benefit the majority and are really good overall and can be delivered, are put to one side for those who just say, right, that's it. That's how it's going to be. And we are seeing today, sadly, where strong men can take us.

**JG:** Having mentioned President Putin, it would be remiss of me not give you the opportunity to give us your reflections on the Ukraine. I'm sure, like everybody, you are watching with horror the images that we're seeing.

**TM:** It is absolutely horrific, and I think we should remind ourselves that it is an illegal invasion, an illegal war. Vladimir Putin has brought war to mainland Europe, but it's not his first invasion of Ukraine. Of course, he invaded Ukraine in 2014 when he took Crimea. I think he has underestimated – significantly underestimated – the desire of Ukrainians to be free. He cannot understand that. He still has the image of the Soviet Union. He cannot understand this sense that people have. I think the huge thing one sees from everybody in Ukraine is that they want to keep their country. They want that freedom, they want that independence. And I think that what we're dealing with here is, not just defending Ukraine but actually defending the very essence of democracy itself. And I think there has been a concern that many people have felt that perhaps the West has been less prominent in defending its values in recent years. One could talk for a very long time as to why that might be. I think President Putin was an opportunist. A lot of eyes were on China, he underestimated the response of Ukraine and probably underestimated the response of the West as Russia is now experiencing in the economic sanctions that have been put in place.

**JG:** Having dealt with him personally, has any of this surprised you? I think we were all surprised by the dimensions of the military action taken, but personality trait wise, has any of it surprised you?

**TM:** Well of course, I think in the UK, we're perhaps less surprised at anything that Vladimir Putin will do, given that he, Russia, used a nerve agent on the streets of one of our cities in an attempt to kill two people. And sadly, one British citizen lost her life as a result of that. So, the fact that Russia has no compunction whatsoever in using a chemical weapon on a street like that. And we've had the Litvinenko issue here, we've seen the Alexei Navalny incident. I don't think anybody can be surprised at anything.

**JG:** It's absolutely horrifying, and terrific to have your insights on it. As we think about this theme of perceptions of leadership and our perceptions of male leadership and female leadership, one thing that has always struck me as a woman in the public eye, is that emotion is read differently from male and female leaders. An angry man is very likely to be viewed as strong, an angry woman is likely to be viewed as hysterical. A man who's been moved to tears by a particular event is viewed as showing his

compassionate side, a woman moved to tears is at risk of people saying that she's lost it, that she can't take it. That the pressure's broken her. And you and I have lived through some of this.

I watched the day that you gave your final address as Prime Minister and there was just a small catch in your voice as you delivered those last few words and this was reported as you sobbing. I know from talking to your media people that in the lead up to you exiting as Prime Minister, they would regularly take calls from journalists saying, is she going to cry? When is she going to cry? This bookie approach to: on which day is she going to shed a tear. Can you talk to us about how that made you feel and what that is telling us about gender equality and perceptions of female leadership?

**TM:** I think it's telling us there isn't much gender equality in people's perceptions of leadership I'm afraid. It is very difficult. It's absolutely true. In a lot of interviews people almost wanted me to say that I'd cried at various points on various issues. And yet, if I'd said that, it would have been absolutely that, oh no, women can't take it. What's she doing there? She obviously hasn't got the guts for it, hasn't got the ability to do the job.

There was a book written by Allison Pearson some years ago with a character called Kate Reddy who is a businesswoman. I forget the title of the book, but it ran through various things. And it had her at a point where she was in a meeting at business and she wanted to leave early to go to either her children's school play or parent's evening. And she was sitting there thinking, if I leave early now to do that, they are going to say, typical woman. If one of the father's left to go to watch his children in the school play, what a wonderful father. It's not just in politics. Sadly, we haven't quite broken down all those barriers and those attitudes. But you are absolutely right, you have to, as a woman leader, you're walking that tightrope – if you're too emotional, you can't hack it, if you're not emotional, then what sort of woman are you?

**JG:** Yes, and on the, what sort of woman are you, both of us I think were very conscious of that tightrope. I was certainly conscious of it on the final press conference I gave as Prime Minister where I was absolutely determined to not cry, to not look like I was anywhere near crying. Just make sure none of the bastards got that satisfaction. Channelling my inner Australian, you don't have to match that language.

But the effect of it then – when you're calm, you're controlled, when you've read the brief, when you're across the facts, when you're focusing as much as you can to get it out as accurately as you can – then the criticism comes, you're robotic, devoid of emotion, you were referred to as the 'Maybot'. I didn't get a

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... if I leave early now to do that, they are going to say, typical woman. If one of the father's left to go to watch his children in the school play, what a wonderful father.

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nickname like that but robotic was a word very, very, routinely used. Looking back on it now, I can't even desegregate in my own head how much of that is because I was being so cautious about getting things right. How much of it is this narrow pathway women have to weave between strength and empathy. If you fall off one side or the other, you're in a lot of trouble. How do you reflect back on those things now in terms of your own performance?

**TM:** I think the answer is a mixture of those things that leads to that. What I have found frustrating about it, was, from my point of view, I was always just trying to, as you just said, be as accurate as possible. Be as clear as possible. Not try to fudge issues but be careful so you didn't give people the wrong impression one way or another. And to me, that was about being more professional, actually. But somehow, a lot of people didn't want the professional. They wanted something else and therefore if you didn't give that, then the robotic, the 'Maybot', that sort of description was used.

But the trouble is, as we've just been discussing, if you gave the human side of it, when you're a woman then that tends to be pounced on far more and not seen as the positive that it should be. Or that it could be or would be in the case sometimes of some of the men. Looking back on it, should I have perhaps cracked a few more jokes with some of the media sometimes? But then actually, there was a bit of me that thinks, well if you do that, are they



going to misinterpret that? You're constantly thinking this through in case what comes out is completely different to the way you intended it.

**JG:** Yes. A joke that went badly.

**TM:** Yes exactly.

**JG:** One thing people don't appreciate from the outside so much is, often these days in press conferences, is no one's looking back at you, because all of the journos are hunched over their phones. They're waiting for the latest flash so that they can get you on the grab. Did you know 20 seconds ago, one of your ministers said, X. Well obviously, I don't because I've been standing here for more than 20 seconds. But that's what they're looking for. You're actually delivering lines to just a sea of bowed heads. It's hard to get a bounce off it in a human sense.

I want to take you now to some of the policy work that you did. Neither of us have had to personally manage work and family life, having children and careers. But literally billions of women around the world do. We're all trying to strive for the public policy choices, the corporate choices, the university choices

that would make that easier. As Home Secretary, you put in place the right to request flexible work in the UK. Can you talk to us about what motivated you around that and how you're thinking now about the world of flexible work given the pandemic has taught us that there are many more different ways of working than we saw before.

**TM:** Yes. It was talking to women when I was doing the policy role. I was Minister for Women and Equalities. This whole issue of caring responsibilities was constantly coming up as one of the challenges that women particularly had in relation to managing the workplace. That's what led to the concept of the right to request flexible working. To just give that ability to be able to manage your time somewhat better with other responsibilities that you might have. A lot of women today find themselves not just with childcare responsibilities, but sometimes with elderly parents caring responsibilities as well. They're sandwiched between those two, so that flexible working and the right to request it was an attempt to find a way to give some ability for that to take place.

What was interesting about flexible working is that very often at a very senior level in business,





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managers would recognise the importance of it, but middle management did not like it. It was middle management that found it most difficult. I think it was because, often, for middle management, presence in the office was their way of judging your output. Rather than actually having to judge the output on its own sake. So, if you're in the office, you were working. The fact that you might actually be flexibly working – be at home and produce as much and as good an output as in the office, they found difficult to comprehend.

What has happened of course through the pandemic is that's turned it all on its head because now everybody has found that they can, unless they're doing a very practical physical job, work at home. I always say to people, when I was a child Zoom was an ice-lolly and now it's a major means of international communication. There's a positive to this. It can be done. So, hopefully more managers will recognise now, and I think we will see flexibility being offered for all in a way that wasn't previously.

But there's a potential negative here for women, of which we have to be aware. If more women than

men use flexible working – so more of the women are not physically present in offices, being seen by senior management, able to have the conversations in and around the coffee machine – then there's a potential that they will lose out. Can I tell you a wonderful story about a woman I met actually in Australia?

**JG:** Yes.

**TM:** Who worked for a company. She worked out the time that the chief executive arrived in the office every Monday morning. So, she made sure that she got there a little before that time. She waited by the lifts until she saw the chief executive walk in. And she pressed the lift button and, lo and behold, they always went up in the lift together and her career blossomed. But that's about women actually seeing the opportunities to make the most of that physical presence. I think there's a danger if we see a lot of women rightfully doing the flexible working and seeing that as a way to better manage their responsibilities, but perhaps forgetting that out of sight can be out of mind.

**JG:** Yes, this is actually a big stream of research work for us at The Global Institute now. How do we harness the possibilities of virtual work without this downside? We've also spent quite a lot of time on gender pay gap reporting. When I say we, I actually mean the research staff. I don't do anything except bask in their glory. But the researchers have been doing a lot of comparative work on gender pay gap reporting, what it looks like in different countries and how good it is. Regarding the introduction of gender pay gap reporting, can you tell us what motivated you there and how hard a fight was it?

**TM:** I'm going to be entirely honest. Initially I had to be persuaded about the reporting. I suppose I thought overall figures were fine. Actually, a concern was, is this going to be too difficult for businesses to actually be able to produce these figures in a way that was going to be meaningful. But we worked it through, and we found a way of doing that. And I think it's been incredibly important. And, of course, what was the organisation that hit the headlines for its huge gender pay gap? The BBC.

It shone a light on things that nobody had even thought it would shine light on. It was quite a battle to get it through, but I think it has been proved to be right. I want it to go further and introduce ethnicity pay gap reporting. We had that in-tray, sadly it hasn't been followed through. But I will still press on that. Actually, I think these days, a lot of businesses are further ahead than governments on some of these issues. Because I think a lot of businesses recognise that there is now a generation of young people, not just women, but young men and young women, coming into the workplace who want companies to be providing these opportunities – flexible working, diversity, and so forth. There are employers out there who are starting to recognise that. Sometimes it takes governments a little time to catch up with them.

**JG:** I want to take you now to a few other pieces of research which are well known in the gender field. There's good research showing that women face a glass cliff, which means they're most likely to get opportunities to lead in the midst of a crisis. And there's also research that shows we are suckers for confident, charismatic men that people assume that they would be good leaders even though confidence and charisma are not correlated with positive leadership at all. Does any of that seem right to you?

**TM:** I think it is interesting. The world in which we live today is much more a world of celebrity, a world where personality is valued. I think most voters just want their politicians to understand what they need and get on and deliver for them. Get on and do the job. But in today's world, that's not what fits. That

sense of charisma is large in people's expectations. I think that you're absolutely right of course. Women often find themselves in leadership roles at times of – you said – crisis. In times of great challenge. And it's the same in businesses. Often, in a crisis: 'What have we tried? Let's try a woman. We've not done that one before! There's an element of that in business and in politics. I actually think for the electors, they just want politicians who are going to deliver for them. Understand what the issues are, find ways through them, and find ways to improve their life, which is what we're all in politics for.



## A Podcast of One's Own

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# ON INVESTING, MANAGEMENT AND THE CHANGING WORLD ORDER

What history has taught us

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**RAY DALIO**  
CONVERSATIONS WITH TYLER

*Interview by Tyler Cowen*

*Illustration by Vaughan Mossop*

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**Tyler Cowen:** Ray Dalio needs no introduction. Most notably, Ray has a new book out, *Principles for Dealing with the Changing World Order: Why Nations Succeed and Fail*. Ray, welcome.

**Ray Dalio:** Thank you for having me.

**TC:** The very first sentence of the introduction in your book is this: 'The times ahead will be radically different from those we've experienced in our lifetimes, though similar to many times in history.' Do we see this today in current market prices? And if so, which ones?

**RD:** We certainly see it today in market prices and in everything that's happening. There are three – sometimes, maybe we could stretch that to five – big things that are happening. They are reflected in

market prices and the dynamics behind them, and their change will be reflected in changes in market prices.

Those three big ones are, first, that which is happening with money and credit. In other words, when you get close to a zero interest rate, and you spend a lot more money than you earn, then the government does that, that means that a lot of money is printed, and it moves its way through the system in a way that is reflected in market prices. That is what is happening now.

The second is the very large internal conflicts that we're having that are due to wealth gaps, political gaps, and so on, that influence the left and the right and the dynamic between them, that affects tax policies, that affects capital flows. They're reflected in market prices and will change as those circumstances change.

The third big influence is the rise of a great power, China, to challenge the existing leading power and the existing world order. That is being reflected in market prices but will be reflected *more* as those circumstances change. Those are the three big influences – to answer your questions – that are reflected, maybe not yet adequately, and we have to look ahead of what things will change.

The other two that have been reflected through





history – and I didn't have a full appreciation of until I studied the last 500 years of history – those two are technology and inventiveness changes. We're accelerating the rate at which they are occurring. That adaptability and change is affecting our lives in big ways, so you cannot ignore the technologically and inventiveness changes.

The fifth is acts of nature. The one thing that was interesting to me when I studied the last 500 years of history is that acts of nature – and they could be climate-related droughts and floods and pandemics – had cost more lives and toppled more civilizations than anything else, including wars. They are something that comes along irregularly. When you have the pandemic or the drought or that event that comes along once in 100 years or so, they have had big effects, too, so the pandemic is a reminder of those. Those are the drivers, and they will remain the main drivers, and as they change, prices will continue to change.

**TC:** If I look today, say, at equities prices, they seem fine. If I look at the 10-year yield for the US, it's not crazy high. Should I just assume that these matters are more or less going to work out fine, given those market prices? Or are those prices wrong?

**RD:** No. I think you have to look at the dynamic *behind* those prices. I think I would look at them a bit differently. Regarding the dynamic behind those prices, it is that we are spending more than we are earning by a lot – individuals and the country as a whole. We need money, partially because of the political issues, partially for all the reasons that you know. A lot of debt is being created that is also producing the need for a lot of money. As a result of that, we have very negative real interest rates. Real interest rates of short-term interest rates are significantly negative. When one looks at the return of owning those bonds, that is a very bad return. It means that if you save in those assets and you put it away, that you will lose buying power, at probably a rate of 3 to 5 per cent per year. We can guess what inflation is, and we can talk about that. But you will lose that, and that tax on your buying power makes one not want to be saving in those assets. It makes one want to borrow in those assets.

The availability of credit and that set of circumstances drives money into other assets. Those assets are investment assets, as well as goods and services. What we see now is that stocks are not expensive – not very expensive, maybe a little bit more so than normal – relative to bonds, which are very expensive, but still not expensive in relation to cash. They all have expected returns that are comparatively low, and we have an inflationary period. It's very important to understand the paradigm that we're in and how that

dynamic works. As the inflation pressures become an issue and we have relatively stronger growth, those things will start to change.

The big question that the markets look at is, how will that change as a result? And will the Federal Reserve and other central banks begin to tighten monetary policy? Because these things will change. What will tax policies be and the like? Those things will affect market prices going forwards. It's unsustainable.

**TC:** Help me put this in the context of finance theory. If I look at the literature on finance, it's very hard to predict excess returns. We're not even sure beta predicts excess returns. Firm size, maybe a little. Price to book value, maybe a little. Are you suggesting that the factors you're citing predict excess returns? If so, why don't we find that in the research literature? If not, why do we think they have predictive power? Do they predict excess returns? Polarisation, credit, rise of China – they don't seem to, in finance papers.

**RD:** There are so many people who write finance papers, and then there are people who make money in the markets. I can't speak for those who are writing the finance papers, but I can answer your question in terms of the predictive value of those things, okay? As we deal with the mechanics of debt, or excess returns, there's always, throughout history, a debtor and a creditor. There's always, throughout history, the ability to create demand by creating debt and by creating money. Then there become clear preferences for doing one or the other. There are environments like the late 1970s, when Federal Reserve Chairman Paul Volcker tightened money and wanted to make it good to save and bad to borrow and have credit. That set of circumstances was caused, and that action was caused, by things that happened before it. That produced high real interest rates and the like, and that produced the environment that we had, largely, the disinflationary environment that followed.

Similarly, the 1960s led to the 1970s. The sixties had too much debt creation due to war in Vietnam and what we call guns and butter policies. We were spending more than we were earning. That led to the necessity, in 1971, for the Federal Reserve, for the president of the United States to acknowledge that they would no longer be able to pay the dollar claims in gold and to default on the gold claim and to devalue the exchange rate and to devalue the dollar, which led to the 1970s inflation, and so on.

There was always, all through history, the dynamic in which there was high real interest rates, and it pays to be a saver for some times. There are times when there are very, very low real interest rates, and the need to create a lot of money and credit, and it pays to have the opposite side of assets positioned in the opposite way. And that's been true throughout



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The market is like a poker game. I've played the poker game for over 50 years. I'm saying it's a zero-sum game relative to what's priced in, and the smart people take money away from those who are less smart. That's the way it works. I wouldn't be in the business – I wouldn't be on your podcast, I presume – unless that was true.

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history, and that's the main driver. I think, when we look forwards, we can use those as guides to what's likely to happen in the way of excess return. It's, in fact, the way the system works. In other words, investors, borrowers and lenders look at the relative expected returns of cash, bonds and other asset classes, and move their money between those things based on the relative pricing.

**TC:** If I look at the *macroeconomic* literature, it seems to me, even GDP, when we run statistical tests, it's hard to distinguish that from a random walk with trend. There's not a lot of obvious mean reversion in the system.

**RD:** I think we're referring to different things. You're referring to what you're reading in the literature, and I'm referring to my 50 years of experience and what I'm doing, so we have a different perspective about those things.

**TC:** Tell me what's wrong with the literature. Those are actual numbers taken from government databases. You run statistics on the – returns are close to a random walk. GDP is close to a random walk with trend.

**RD:** It's not random at all. In other words, do you think where interest rates are is random? Do you think it's random? Do you think that it would be random that the Federal Reserve would tighten monetary policy? Do you think it's random that we're having inflation pressures? Do you think those things are *random*?

**TC:** I think the market has a model of what will happen. It's hard to beat that model. But look at it this way: the factors you're citing to me – they're publicly available information. We're talking about them on a podcast. Why shouldn't they already be in market prices?

**RD:** The market is like a poker game. I've played the poker game for over 50 years. I'm saying it's a zero-sum game relative to what's priced in, and the smart people take money away from those who are less smart. That's the way it works. I wouldn't be in the business – I wouldn't be on your podcast, I presume – unless that was true.

**TC:** Well, it's one thing to think some people are smarter than others, but if they're smarter than others with respect to the ability to just spot publicly available information, it seems that's easy to copy. We should then be able to go back in history, look at those same pieces of information and use them to predict expected returns, but we can't do that.

**RD:** Some can and some can't. I guess you look at the track records over long periods of time, and you decide who can and who can't.

**TC:** Let me ask you a few questions about reserve currencies, which is a key theme in your book. If deindustrialisation is a real problem, including for national security, isn't having a reserve currency actually a disadvantage? Is that, on net, a good or bad thing?

**RD:** The dollar as a reserve currency gives one the ability to print the world's money. Net – it's like debt. Is debt a net good or bad thing? It is *both* a good and bad thing. Being able to create debt gives you the buying power. Being able to print the world's currency – such as when we were in the COVID crisis – and being able to print the currency that, around the world, will be accepted, allowed us to sell more debt. When one owns debt, the buyer of that debt is owning your promise to deliver them currency. When you



have the world's reserve currency, it allows you to get into more debt. Now, getting into more debt creates obligations to pay back. Those obligations to deliver currency and pay back have produced different types of problems in the future. Debt is very short-term stimulative, and it's longer-term depressing. As John Connally said, when he was the Treasury secretary and the dollar was devaluing and at risk, he said, 'The dollar is our currency, but it's your problem.' That has a net benefit. It's a net benefit, but like most things, it's cyclical because you have to pay back, and it produces problems sometimes when you pay back. The United States is more indebted as a result of it being a reserve currency, and it all depends on who's going to get stuck with that.

**TC:** Germany and Japan can often borrow at lower interest rates than we can. Does having the number-one reserve currency matter so much?

**RD:** It matters to the extent that Germany and Japan don't have anywhere near as much foreign debt.

**TC:** Japan has incredible levels of debt. It's domestic, but they still find people willing to take it.

**RD:** It's domestic debt. In other words, they found their population to buy it. They're a net creditor country. The United States is a net debtor country. Almost all the main owners of Japanese debt are the Japanese central bank and the Japanese population. It sells very little net on public markets.

**TC:** Sure, but the yen is traded internationally, and Japan has done this without the value of the yen collapsing, hardly.

**RD:** Because of the supply and demand that I've just described to you. I think I've answered your question. We just have a different view.

**TC:** If we think about macroeconomic cycles, Christina Romer claims a lot of downturns are the result of Fed contractions. Jim Hamilton claims that some downturns are the result of high oil price shocks, and you have a theory of debt cycles. If you're just trying to apportion out mentally, how many of the cycles are Fed contractionary shocks? How many are oil shocks? How many are debt cycles? How do you see that landscape?

**RD:** I think that there are goods and services that exist in a certain quantity, and then there's a certain amount of money and credit, and they interact. And throughout history, if you have, let's say, an oil shock that is not accommodated by an easing of central bank policy – in other words, the production of more

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I learned that things that hadn't happened in my lifetime, but happened before and I didn't experience, were good rules.

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money and credit – then if there was the *same* money and credit and you had an oil shock, then as oil goes up, something else would have to go down, and it would produce one set of circumstances. It would produce a consequence, and it would produce a transfer of wealth for those who are selling the oil at a high price – they gain wealth. And it would produce a decrease in the wealth for those who are having to pay that higher price. For example, it would make Middle Eastern countries richer, and it would make American companies and American entities poorer. That's what would happen in a world in which we were to look at those items, and that certainly can cause a downturn in the economy. Similarly, now, where you can print money and credit, you can create money and credit, and it could have its effects. But to answer your question about do oil shocks or Fed policy have an effect? The answer is both because, for other reasons, the tightening of money and credit reduces demand for things, and as a result of reducing the demand for things, it weakens the economy. Both an oil price shock or some other shock or a Federal Reserve tightening can cause the economy to weaken. That's the answer to your question. Then it would have different implications, depending on whether the central banks provided more or less money and credit.

**TC:** Are currently observed rates of inflation in the United States going to be transitory? And what do you understand by that term?

**RD:** I'll start by what I understand by the term, and then I'll answer your question. By transitory, I think everybody understands that to mean temporary shocks that don't become chronic, and therefore, we don't have a chronically higher rate of inflation. It settles back to the older rates of inflation that existed before it, but it's not a problem. That's what I mean by transitory. Do you agree with that definition?

**TC:** Sure, it's fine, yes.

**RD:** Okay. No, I don't believe it'll be transitory. I believe that there are two main sources of inflation. There's the usual supply and demand for good – cyclical inflation – so that when there's a demand for something that there can't be a greater amount of supply being produced for it, there's an upward pressure in that price, and that comes from strong demand pressing up against capacity limitations. That's cyclical inflation, and it depends on how far the central bank accommodates that. The second is monetary inflation. When the production of debt is large, but the central bank produces more money and credit, that has the effect of devaluing the value of money and credit, which doesn't show up, really, as it looks. It doesn't look like it is going down as much as it looks like other things are going up so that you see things going up, as they are now, and that's monetary inflation.

I think right now we have both cyclical inflation and monetary inflation. If you look at the demand for everything, right now the demand is greater than the capacity. It's really an excess demand issue. We also are running large deficits, and as we start to look farther forwards, we have these very cheap interest rates, which means that it pays to buy things like, let's say, houses. Practically, there's no interest rate to speak of, and now a lot of loans are made on interest-only loans even. There's a lot of demand for those kinds of things. Now, that could be cyclical, but I don't believe, when I look forwards, that our deficits will be primarily cyclical.

I look then to the issues of politics, and the issues of the deficits, and the needs for money and credit or the desires for money and credit, and I think that they'll be structural. Also, there are certain changes in expenses. For example, while I believe that climate change and moving to cleaner energy and other such moves is very good for our ecosystem in the long run, it's also very expensive, and it makes less efficiency. So, that's going to, at that same time, add to inflation. My worry or belief is that that will increasingly be built into the process, which we're seeing, for example, in terms of changes in compensation, changes in many, many things. Everybody's seeing inflation around them, and it's not just something that's going to settle back.

If I take the cyclical piece, it's going to require enough of a tightening – if you were to deal with that – enough of a tightening in monetary policy to stop that buying. And the consequences of that would be very bearish for markets, and it would be very bearish for the economy and, I believe, too bearish for the Federal Reserve to want to tolerate. That would only deal with the cyclical inflation pressures, whereas at the same time, we have the structural issues of those kinds of deficits that need to be monetised. For those reasons, I don't believe it's transitory, that we will go back to what we experienced before.

**TC:** If you had to describe it in its most fundamental terms, your advantage as an investor compared to other professionals – is it that you're smarter, you process more information, you have better managerial methods? How would you pin down your unique advantage and expertise?

**RD:** Well, a few things. I have built an organisation that systemises the process to seek the timeless and universal truths of the cause-effect relationships. We have 1,400 people or so. We spend hundreds of millions of dollars each year on data and quantitative analysis. When I say timeless and universal, I learned early on that many things that happened to me and came as a surprise were things that hadn't happened in my lifetime, but had happened many times before. The first of those – 1971, I was clerking on the floor of the New York Stock Exchange when, on the 15<sup>th</sup> August, President Nixon ended the convertibility of US dollars to gold. I thought there would be a crisis and everything would go down, and I was totally wrong. I found out that the stock market that morning went up more than it had in decades. That led me to research and find out that on the 5<sup>th</sup> March, 1933, President Roosevelt did the exact same thing, and it led to the exact same result. At that mistake, I learned that things that hadn't happened in my lifetime, but happened before and I didn't experience, were good rules.

I needed to study, for example, the dynamic of the Great Depression. By studying the dynamic of the Great Depression, I and we at Bridgewater were able to anticipate the 2008 financial crisis and do very well in it, only because we looked at those things that happened before. It's that which led me to do this study. I did this study not to write a book. I did the study because these things that are happening now did not happen in my lifetime, so I wanted to study the cycles, like the rise and decline of reserve currencies, empires and so on. I needed to study the last 500 years. What is conveyed in this book is what I learned from doing those studies, those patterns, and I put it out there for people to judge for themselves the merit of them. They can judge for themselves.

I understand different people might have different views, and it's totally their prerogative. It's out there for people to learn, and it's been that approach and the systematisation of that approach with a lot of great people that has been the basis of our success.

**TC:** Your management idea for radical transparency – where did that come from and how did it evolve? When did you start it?

**RD:** I started Bridgewater – I didn't even think of it as starting a company – just two years after I got out of school. It wasn't a company, really. There was somebody I'd played rugby with and then a couple of other people, and the idea was, we're going to be truthful with each other – truthful and transparent. I have this belief that what brings me satisfaction is excellent work and excellent relationships. I was taught in the markets through my experience that being as accurate as possible is my goal. Then to get at truth – what is true is fundamentally important in both making better decisions and also making good relationships, trustful relationships. For that reason, it seemed apparent that, whether it's in the markets or it's dealing with people, being radically truthful and trying to work things through to find out what's the best thing to do, given those realities, is fundamentally beneficial. All through my life I was influenced to do that. It just seems like the obviously better thing to do than to be the other. I think it's very odd that the world questions being very radically truthful and radically transparent with each other, to try to find out what's true. I think that's a problem that the world faces in terms of those sorts of things. Anyway, I came by it that way, and I wouldn't compromise it. As the company grew from a couple of people – I had a two-bedroom apartment. It came out of the other part of the bedroom, and then it grew. As we grew to, let's say 1,500 people, there needed to be an organisation and a culture that is built around those things. That became of paramount importance.

We built our culture. It's not for some people, and it's great for other people. With time, we've done that, and that's what we do. That has served us *really* great. It served us not only in terms of the investment management aspects of it, but it's also served us very well in our relationships – that we can talk about anything frankly, and that we can deal with anything. As a result of that, it deals with things well, and it also produces better relationships. It's been something that I believe has been key to our success, and it's also something I recommend very highly. I understand people aren't used to it, and so on. It can be adapted. That's how it developed.

**TC:** What's your model for why more of the world hasn't followed suit? Is it that leaders are cowards,

too many workers are too emotionally fragile, just status quo bias, or what?

**RD:** I think it starts partially neurologically, and partially how we're raised. There's an instinct to view disagreement as a fight. There's a fight or flight response, sometimes, to disagreement, rather than a curiosity to try to find out what's true. Then, I think that we're raised in an educational system in which people are reinforced for having the correct answer. Like there *is* a correct answer. Certainly, there's a correct answer – two plus two is four – but sometimes, in things, there isn't, and to not know and to disagree are bad things. I think we're raised that way. It becomes a habit that disagreement causes angst. My theory – I ask neuroscientists, I ask psychologists about it, and they come back with those kinds of answers as to why that's the case. I found it in Bridgewater and other ways that that's, for most people – maybe half the population or more – with practice and in an environment in which it's valued intellectually, that they can get used to it and then not want it any other way.

Let me just reverse it, and I would say, like I would say to anybody if we disagree, do you want me to have a good conversation with you? Maybe you and I are having some disagreement as to how the economy works, or whether the markets are efficient, and so on. Is this a *good* thing, or is that something that produces angst? I think it's a good thing. Do you want me to be totally transparent with you about what I think? Or do you want me to hold it to myself, and ask you the same question? I'd say I want to hear whatever you think because if it's on the table, we can deal with it. There're two parts to our brain. There's the intellectual part of our brain, and there's the emotional part of our brain. The intellectual part of the brain usually says, 'Yes, I would like to know, and I'd like to be able to have that exchange.' And the emotional part of our brain seems in conflict with that. That's what the psychologists and neuroscientists say, and that's why it's interesting to them to see how we've created this different culture.

It's not easy, but it's like eating healthy and doing exercise, and so on. If you're around a lot of people who recognise that it's healthy, and you live in that kind of an environment, you'd probably *want* to do that. You, in fact, wouldn't want it to be the other way. Many people who work at Bridgewater would find it very difficult to work in most other companies because they wouldn't operate that way.

**TC:** What do you think you know about psychometrics that other bosses do not? How do you use psychometrics more effectively?

**RD:** I think I know a lot about psychometrics



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We *much* prefer honest, thoughtful disagreeableness because we don't want answers as much as we want reasoning, to examine the reasoning that leads to the answers.

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because of my experiences in the pursuit of it as an important interest to me. I think that most bosses don't know *anything* about psychometrics, and I would encourage them to learn about psychometrics. Psychometrics are a means by which asking a bunch of questions, and so on, helps to measure how somebody thinks about things. It's common sense—if we ask a bunch of questions, we can learn what your profile is. Online, for free, I put out our version that I worked with three great psychometricians to produce, and people can experience it for themselves. It's called PrinciplesYou. It was developed by me working with Adam Grant, John Golden and Brian Little. If you look at their credentials and so on, they've been doing this for lifetimes. They're the experts. Go online—it takes about half an hour to do—and see how well it describes how you think, what your preferences are. There's a cool thing that allows you to have somebody else do the same, and you could put it in, and you could see how it describes your relationship, based on how you think.

Now, the reactions to those things have been amazing. They're amazingly effective, but it's not a new science. It's something that existed a long time ago, started a long time ago. I started because I saw that people's approaches to thinking were different, and I didn't understand it. I gave 150 managers in my company, first, the Myers-Briggs test, and it came back. I asked them how accurately it described how they thought, rated on a scale of one to five. Eighty-five percent of them said it described them as a four or five, so, very well. I read these descriptions, and in some cases I said, 'I can't even believe that people *think* that way.' That's my interest, and that's

why I have an interest in it. I think other people who run organisations or really have to deal with relationships should look into what psychometrics can do to help them.

**TC:** Do you think Bridgewater, on net, is selecting for agreeableness or disagreeableness, as one might express it?

**RD:** We *much* prefer honest, thoughtful disagreeableness because we don't want answers as much as we want reasoning, to examine the reasoning that leads to the answers.

**TC:** If you apply psychometrics to the United States of America – our moral character and psychology – where exactly are we falling short most of all?

**RD:** I think the greatest problem that we have is fighting with each other over views and opinions, to the point that we are risking a civil war. The question for all disagreements and all major disagreements is, how do you know you're right? If there are two people who have an opinion, how do you know you're the one that has the right one or the wrong one? I've learned from mistakes. I worry about being wrong, and by worrying about being wrong, I don't know if I'm the wrong one or the right one. The only way I can get to that answer is to find the smartest people I know who disagree with me and hear their reasoning.

That's a path that has worked well. But if we now apply this to the country as a whole, and we have disagreement, I think our best question is, how are we going to successfully and not antagonistically get to the desired answer? I think it requires thoughtful disagreement. Frankly, I care more than anything that we, together as a country, come up, resolve our differences as democracy used to work and be productive. If we can be productive and resolve our differences so that we have internal order and harmony, I don't really care much about other things. There are some opinions that it's got to be exactly this way or that way, and I think that we're in a dangerous situation. I have a principle, which is, if the cause you are behind or the cause that people are behind is more important to them than the system, the system is in jeopardy. I think that's the case now. If I was president of the United States, I think it's such an important thing, I would probably have a bipartisan cabinet, and I would try to bring together the middle of the middle, and then have those in the middle try to deal with those at the extremes. Because I'm afraid that there will be a pulling to each of those extremes, and that there will be irreconcilable differences between those extremes, and that it will threaten rule of law and threaten democracy. That's what I think about it as it relates to politics and government.



Photograph: Bethany Legg

**TC:** It's striking to me how much your approach to US history is informed by what I take to be an understanding of Chinese history, so the cyclical emphasis. What is your favourite Chinese dynasty and why?

**RD:** Just to be clear on your first statement, it's not Chinese or American as is described in the book. I took all powers that existed over the last 500 years, 11 of those powers, the empires, the rising, and I looked at them all. And then, because the patterns existed in China and I feel I need to understand China well, I also took the dynasties back to 600. I saw these patterns over and over again, and they're not Chinese, they're not American. They're universal because human nature is universal. When I look at a Chinese dynasty or a great European power and so on, the parts of them – they all have risen, and they have all declined. When we say that we like a dynasty, I like the things that make it rise and be healthy, and I don't like the things that make it decline and be unhealthy. I don't feel there's a dynasty or an empire that I admire in totality. It's those things that I admire, and what those things are across is, they're measured in the book.

I gave 18 measures of them, but there are certain

basic things that they come down to. One, it starts partially with leaders who make things work well. There's a cycle. There's a new order. A new order means that after some conflict, the new power takes over. They win. There's a leader or leaders who then, at that point, have to consolidate their power from those who are in opposition to them, and so on. Then they have to build a direction, and that direction comes down to basic things, such as, first and foremost, education. When I say education, I mean both education of facts like, 'Do you know these facts? Can you read, write and do arithmetic?' kind of thing, but also education in civility – how to behave well with others and your personal responsibility, which traditionally has been guided by family, or could be guided by religion. It could be in the schools, but to know how to be a person of good character and relate well to others.

The dynasties that did that, and you could look at the beginning of all of those dynasties – the Tang Dynasty, the Song Dynasty, the Ming Dynasty – just as you can look at it in terms of the early stages of many, many empires, including our own – the American empire after World War II particularly. Education, and then converting that education and that civility to

productivity, to be able to work well in a harmonious way with each other, a competitive harmonious way, to raise the living standards so that you are earning more than you are spending.

This is a fundamental thing – productivity and earn more than you're spending, so you don't depend on the building up of debt that eventually you can't pay back, and that rise. Then I see in all these dynasties and all these empires that there becomes, then, more debt creation, sometimes more speculation, and there become greater gaps – greater wealth and opportunity gaps. Wealth gaps emerge because the cycle produces different opportunities. Some people make a lot of money and others don't, so naturally it produces a wealth gap. But that wealth gap can be self-reinforcing because the parents who have more money give their kids better advantages, and they have more power than those who are born into families that don't have much.

Then there become higher and higher levels of indebtedness. I've seen this all across countries, all across empires. Then sometimes, because they have borrowing capacity, like having a reserve currency, they can borrow a lot of money. They do that, so they produce larger wealth gaps, more speculation. Then something comes along. They can't live on the debt anymore, and there are various reasons. Then you see deterioration. You can see deteriorations in even the notion of what people are going after. A poor society having to struggle develops different values than one that is born rich and is operating. That's an ingredient to decline.

All of the dynasties or all of the societies that I've seen have had that. In some cases, acts of nature came along, too, and there's an internal conflict over the things I just mentioned – *all* of them – not having enough money, printing a lot of money, being in a situation where they're at odds with each other, and then, often, a rising power challenging that. You see the decline of the Ming Dynasty for that reason. You see the decline of the Qing Dynasty, you see the decline of France, you see the decline of others for the same reasons. Sometimes there are acts of nature, like a big drought or big flood or that causes a famine or a pandemic, and throws everything off-kilter, too. I see those patterns happening over and over everywhere. There's no one dynasty. I like those that do it well, and I don't admire those who don't.

**TC:** How does transcendental meditation improve your work relationships? Why choose that kind of meditation rather than some other?

**RD:** I'll take your second question first. I learned transcendental meditation because it was the thing that popped in front of me, and I was lucky enough to grab it. It was when the Beatles

went to India, and they talked about transcendental meditation, and it was a big thing. There was then a centre in New York. I went and I learned. That was 1969. Transcendental meditation, like a number of other types of meditation, has a mantra. A mantra is a sound that you repeat in your mind. You're sitting there quietly, and maybe one might think of something, like *Om* would be a classic example. You repeat *Om* in your mind when you're sitting there quietly, and what that does – it takes your mind away from your thoughts. Your thoughts are jumping around. They call it monkey brain.

You can't control your thoughts. They're jumping all over, and by repeating that word or sound over and over again, you eventually learn to go into that sound rather than it crowds out all the other stuff, and then eventually it disappears. Then you go into transcending, or let's say a transcendental state, which means that there's quiet and peacefulness. You actually don't see anything, and you're descending into your subconscious.

Now, your subconscious is – like the word implies – below what we're conscious about, but it's very important in how we think. Most of our decisions really come from our subconscious. We talk about emotions and things there – they're subconscious. When you're in your subconscious and you've got this peaceful state, not only does that peaceful state give you tranquillity and so on, and it's very restful, but it also gives you an equanimity, a calmness, and a clarity. It taps into your subconscious because your subconscious is where the creativity comes from. You don't sit there and say, 'I'm going to work hard to be creative.' Creative ideas are the sort of things that come to you in a hot shower. You're not even there, and this idea comes to you, and it bubbles up.

Then, what I found is that aligning the subconscious and the conscious is also like aligning the emotions with the intellect because we get mixed messaging. Like I said, it's like your two brains: your conscious brain – that might be your logical brain, and then your subconscious brain – that's your emotional, and you're getting different messages. The meditation helps to align those and deal with the things that are coming at you. Of course, my business and my life bring me a lot of things that are coming at me that could be stressful, and I find that by being able to have that state of mind where I can align them, have that equanimity, and make the decisions – I found that to be very helpful.

**TC:** What do you enjoy most in jazz music?

**RD:** I enjoy most the combination of extreme talent and spontaneity, particularly when people could do that together. *That* is something. When you listen to really talented musicians who can do it like improv, and they can play off of each other and do it that way–



**TC:** Name a group.

**RD:** I particularly like Jazz at Lincoln Center, and I like Wynton Marsalis and the Wynton Marsalis band.

**TC:** Three quick questions to close. I'll just give you all three. First, why are we undervaluing the ocean right now? Second, why are Cape buffalo dangerous? Third, what are you going to do next? The floor is yours.

**RD:** First, let's establish that the ocean is the biggest thing on this planet, the most important environment. We undervalue it because we don't have contact with it. It's like a sheet. The earth above the ocean, the highest point, Everest, is equal to the greatest depth, the Marianas Trench – 11,000 metres. They are both a piece of the same, but the ocean is 72 per cent of the world's surface. So that means that the space and what it's occupying and the lives that live in it and all of that is more than twice as large as all of the continents combined, and it has an *enormous* impact on our lives. But when we look at it, we just see this sheet over it that's going up and down, and we don't explore it. People who haven't seen beneath that sheet, or intellectualise what is beneath the sheet, undervalue it for that reason. For me, Jacques Cousteau helped me and excited me. As a result, I have been excited about the ocean, and I realise the importance of the ocean. One of the thing – a passion of mine – I've created a ship, which is the best oceanographic exploration and media ship on the seas. We have explorers and scientists go on it, and they use it, and they capture that, and then they're going to be showing that on National Geographic and Disney+ so that people get inspired about it. Anyway, I think it's for those reasons that they don't, and I'm working to rectify that by making that availability. It's called OceanX. If anyone wants to go on and see what it's doing, you can go on. You can search for OceanX, and it'll explain that.

Cape buffalo have killed more people than any other species.

**TC:** More than hippopotamuses have?

**RD:** Even more than hippopotamuses. What do I think about Cape buffalo? I think you're probably referring to my having bow-hunted Cape buffalo. I love being in nature. I love the interactions with species. That experience, which requires focusing one's attention, playing the edge correctly and being in that environment is something that has been invigorating. I assume that's why you're asking that question.

In terms of what is coming next, I'm 72 years old. I'm in an arc. There's a life arc. I'm in the part of the life arc of transitioning out of my second phase of my life

to my third phase of my life. I believe life takes place in three phases. The first phase is, you're dependent on others. You're learning. The second phase, you graduate from school, you graduate from whatever college or high school, and you go to work. And increasingly, you're working and others are dependent on you, and you're trying to be successful. Then as you go to your third phase in life, you no longer have any desire to be more successful yourself. You start to care about others, and you particularly care about others who will be beyond you – your children, your grandchildren, and the like, but also society. And what you want to do is instinctively pass along those things that have been helpful, and that's the phase of life that I'm in.

While I'm still playing my game of the markets and the economy, I'm also doing these studies and doing these investments. The joy of transitioning my company to have others run it, it's like my family – adult children – I don't want to be responsible for their lives. I'm there when they need me, and so on. I'm here to pass along things.

I think that what's next for me – there's this book, which is passing along what I think are the most important things of our time. People can take or leave them, but I think they're important. Others have said – Henry Kissinger, Larry Summers – that this is a very important book, and anyway, people can judge for themselves.

My next will be to complete my economic and investment principles because I do think differently about economics and investments than some people, which I believe is what has given me the edge, so I want to pass that along. I imagine then, in something like a year or two, I will do that, and then I will go quiet.


**TC:** Again, everyone, Ray's new book is called *Principles for Dealing with the Changing World Order: Why Nations Succeed and Fail*. Ray Dalio, thank you very much.

**RD:** My pleasure. Thank you very much.



## Conversations with Tyler

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# RUBIES IN THE RUBBLE

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# ON BOWLING ALONE AND LIVING TOGETHER

## Understanding social capital

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### ROBERT PUTNAM THE GOOD LIFE

*Interview by Andrew Leigh*

*Illustration by Vaughan Mossop*

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**Andrew Leigh:** Robert Putnam has produced nearly a dozen books on topics ranging from arms control to poverty. But these aren't just any books. They're both door-stoppers and conversation-stoppers, intensely researched, peppered with insightful anecdotes and rigorously analysed data. I first got to know Bob when I took his Social Capital course in 2001, and spent a year working part-time as one of his research assistants. The team of half a dozen of us would analyse data or prepare literature reviews, and then present them to the others who'd pick them apart. Once Bob was satisfied we'd comprehensively tackled the narrow topic we'd been assigned, it would be filed away as an input for him to use when writing the relevant section of his next book. I'd never seen anything quite like it in academia. When I returned to Australia, I wrote *Disconnected*, a much shorter, Australian version of Bob Putnam's seminal book, *Bowling Alone*. Bob gave me thoughtful feedback on the draft even though he'd, by then, moved on to

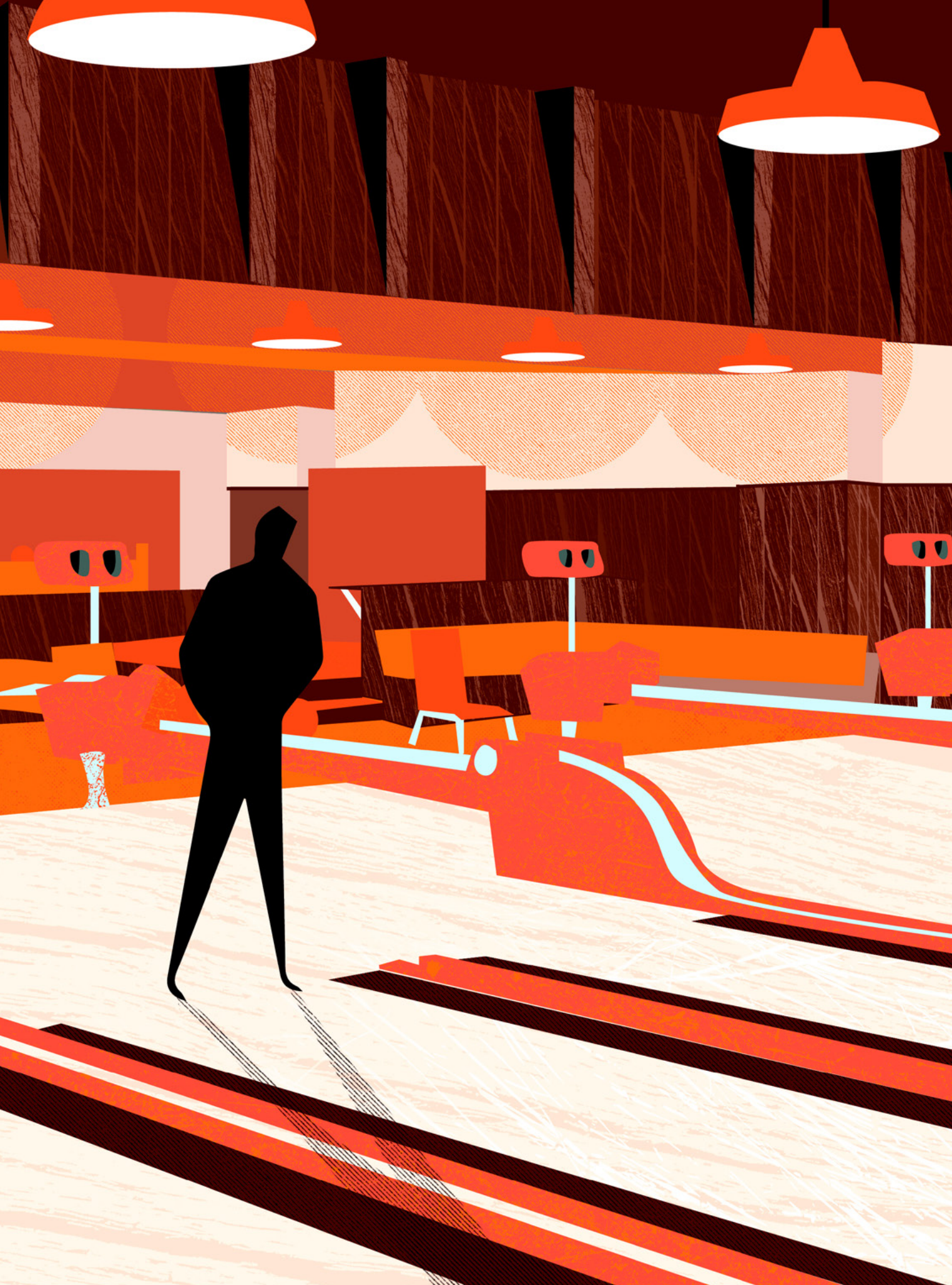
other topics. He isn't just someone who writes about the ties that bind. He practices social capital too. Bob, thanks for appearing on The Good Life podcast today.

**Robert Putnam:** It's great to be with you.

**AL:** I'm interviewing you today as a politician, but it strikes me that talking to politicians can't be that unusual for you. Fifty years ago, you did a PhD which involved interviewing 176 British and Italian members of Parliament. What drew you to that topic?

**RP:** Well, who knows what deeper things drive any of us? But at the time, I was trying to understand what made democracy possible. That is, what were the fundamental building blocks of stable, effective democracy? There was a theory around that which I found quite persuasive – that although the values of ordinary citizens was an important variable, and economic development might be important, and educational levels and so on might be important, the theory said that it's the values and the norms believed in and adhered to by practicing political leaders that was crucial. I thought, at that time, that Britain was a good example of a stable democracy, and that Italy wasn't a good example of a stable democracy, and that I might be able to see if there was anything to







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... it was as if we were playing two different games at the same time. We were negotiating across the diplomatic table with the folks in Panama, but we were also negotiating behind us with a different table. And that kind of metaphor, that we're constantly negotiating at two different tables, struck me.

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this theory if I talked to, roughly, 100 members of Parliament in each of the two countries, and then listened carefully. I sat down with a tape recorder and talked to them. The conversations were quite wide-ranging. Later on, I and a research colleague of mine went through all the transcripts of all these interviews, which parenthetically, turned out to be very valuable. The Churchill Library in Cambridge, England now wants the transcripts of these interviews, because they're now historically relevant. For example, I had an interesting, hour-long conversation with a guy named Enoch Powell, who was, at that point, pretty trivial, but historically was anything but trivial.

**AL:** Was this before his Rivers of Blood speech?

**RP:** Just before his Rivers of Blood speech. But now, historically, that interview, that transcript, is actually extremely important because I had a quite private conversation with the guy, who turned out to be historically important. Whether you like him or not is a different matter, of course.

So we analysed all these interviews. This was my doctoral dissertation, so I wouldn't want to have my scholarly reputation rise or fall on it, but it turns out now to be strangely relevant to our times. Basically, the research was consistent with the theory that the saviours, the guardians of modern democracy would be politicians. That even across party lines, they would insist on fair rules of the game. If there is anything clear in my country now, and maybe in other countries, that isn't true any longer. The most frightening thing to me, and to many Americans, about our current crisis is how unwilling politicians have been to impose basic norms of fairness on one another, on themselves, on their own side. That's actually why I am unusually worried about our current times. Because what I honestly thought is 'Well, that barrier is never going to be broken. Maybe it's going to be broken in Italy or some strange place, but it's not going to be broken in the Anglo-American democracies.' But it is being broken, and it's dangerous.

**AL:** So, I'm here for your retirement conference. I've been to plenty of these retirement conferences and Festschriften, and typically they're a bit scatter-gun. It's colleagues and former students giving papers tangentially related to the retiree. But your wife, Rosemary, has organised this in a very focused way. You've got superstar scholars, people from William Julius Wilson, Robert Axelrod, Jane Mansbridge. There are five panels on your five big pieces of work: two-level games, making democracy work, *Bowling Alone*, *American Grace* and *Our Kids*. I wanted to go through each of those and touch on them very briefly. The first, the 1988 article in *International Organization*, a highly reputed foreign policy journal. Am I right in thinking that that notion of two-level games had its genesis in your work with Zbigniew Brzezinski in the Carter White House?

**RP:** Yes. And indeed, as I've been reflecting back on my work, it's become clear to me that I've been getting by with a lot of help from my friends, and from a lot of unexpected sources. I'm very much influenced by my environment, and so after finishing this first period of my work that you alluded to when you talked about the *Beliefs of Politicians* book, I thought, 'Well, let me put myself in a different world, and maybe I'll stumble on something there.' So, I decided to go off to work for a year or two on the staff of the National Security Council with Jimmy Carter. The first thing that struck me while I was there was that most of our time on the staff of the National Security Council, this is at the White House, we're meeting three steps away from the Oval Office, and I thought we'd be talking about great issues of international strategy and so on. But no. Most of the time, in our meetings, we were talking about domestic, American politics. We were

talking about, 'How could we get Senator Blowhard to support what he ought to anyhow?' For example, to get a Senator's support – he wanted a dam built in his state – and so we would build them a dam, not because it was justified in any policy terms, but because we were playing domestic politics in order to achieve a broader goal, which was to get the Panama Canal Treaty ratified. The Panama Canal Treaty was a perfectly sensible thing, but there were some perfectly sensible people in America who, for whatever reason, didn't want it. So, it was as if we were playing two different games at the same time. We were negotiating across the diplomatic table with the folks in Panama, but we were also negotiating behind us with a different table. And that kind of metaphor, that we're constantly negotiating at two different tables, struck me.

It struck me even more markedly later on. I had been asked to manage a process within the US government, to come up with a stance for something called a 'special session' on disarmament, a big disarmament negotiation going on at the UN. Our main antagonists were the French, and so I was supposed to try to get our stance together and then negotiate it with my French colleague, who had all these various, sometimes crazy, things he was doing. But we got along very well, and so after the whole thing was over I took him out to lunch. And as we were having lunch I was describing to him my surprise that my most difficult negotiation was actually with the State Department and with the Arms Control Agency. And he said, 'The same thing's true for me.' I began using this metaphor that behind each of us was another table that had basically been invisible to the other person. More of what I was doing was negotiating with these folks elsewhere in Washington than I was worrying about what the folks in the Quai d'Orsay felt. And he had the same reaction exactly. The next stage of my career – actually the next 10 years – was spent trying to figure out the logic of what came to be called 'two-level games.' The core idea of which is that people sitting at an international diplomatic table are actually, simultaneously trying to do two different things, and sometimes they help, but sometimes they don't help.

Stepping back a little – the core idea is if you just keep your eyes open to what's happening around you, and you're lucky to meet smart people, you can get along okay. I'm proud of that work, but it's not pride in the sense that I did it. I mean, I got by with a little help from my friends.

**AL:** You did take that risk of stepping out of your academic career at a relatively young age, to get that slice of the practical world. That seems to have been a risk which paid off for you?

**RP:** It sure did. I had been turned onto public affairs in a very dramatic, personal way during the John F. Kennedy period, which was a couple of decades before the period we're now talking about. I had decided that I wanted to contribute in some way to public affairs, and I wasn't sure whether to do that as an academic or do that in government. This period working at the National Security Council was an opportunity for me to see, 'Would I like working in politics, or would I prefer to be in academics?' I decided I would be better off in academics for the following reason. This is actually important for people trying to understand these two different roles. One Monday morning, I went into the office and Zbig asked me to write a memo for the President, urging the President to do X. I thought X was dumb. I didn't think it was immoral. I just thought, 'It's not worth my time. It's certainly not worth the time of the President of the United States.' Even though I walked in every morning to the White House complex, I wasn't all that powerful. I spent a week drafting that damn memo. At the White House, a week is like ages. It took me so long because basically, I didn't think it was a good idea. It just seemed to be so trivial. I remember, very distinctly, looking out my window that Friday when I finally got it finished, and it was in the President's briefcase as he walked out to the helicopter on the south lawn and took off for Camp David. I thought, 'What a waste of a week.' And I thought, 'As an academic, I never work on something that I fundamentally think is trivial, because if I decide it's trivial, I just change and do something else.' Academics basically have a very cushy, very attractive deal. We work really hard, but we decide what we want to work on. What I learned at the White House is, no matter how powerful you are, even if you're the President of the United States, you basically don't get to choose what you work on. You've got to try to persuade other people to do what they ought to do anyhow. That's when I decided, 'I'm going to enjoy it more if I'm in charge of my own agenda rather than having to respond to other people's agendas.'

**AL:** I want to move on to your next passion project, the deep-dive into Italian culture for *Making Democracy Work* – which if I can sum up how I understand it, the finding that not only did Northern Italy have a higher preponderance of choral societies now than the South, but that that was also true hundreds of years beforehand. Did you go to Italy because you were particularly interested in Northern and Southern Italy as a case study, or was there also an aspect of just loving La Bella Paese?

**RP:** That's a really good question. It took me 25 years to do that study. For the first 24 of the 25 years, I completely misunderstood what I was doing. It was



only at the very end that I suddenly figured it out. I won't go through the first 24 years, except to say that I was in Rome doing some other project, and the Italian government fell, and for a long time, for two or three months, there was nothing I could do because the people I wanted to interview were just not in their offices. Then Italy created a new set of regional governments all across Italy – there had never been governments of that sort, and now there were. And I thought, trying to figure out something to do with my time, 'Well, suppose I start studying those things now, and then they develop for a while and I'll follow them, and it'll be a little bit as if some political scientist had been around in 1789 when the US Congress started.' So that was the concept of the project. I was doing interviews all over Italy, and I admit that it was fun. That's an understatement. Every year, for nearly 25 years, I had to go to Italy every summer and spend two or three weeks in Bologna and in Florence and in Rome and in Milan, all for reasons of research, you understand. A friend of mine, Bob Axelrod said to me at about year 20 or 22, 'Bob, until you can figure out why this project should be of interest to someone other than the three people in America who care about Italian local government, don't publish.' That seemed like good advice to me, except I couldn't, for the life of me, figure out, 'Why would anybody in the world, besides the three of us who studied Italian local government, care about it?' I was off in Oxford at Nuffield College for a term one fall. I was trying to work on this and I couldn't sleep one night. I was across the quad from the library, and I thought, 'I'll go over and find some really boring book and put myself to sleep.' There was a big, thick book, which it turned out had just been published in the previous year or two, called *Social Theory*. And I thought, 'Four hundred pages of social theory. That's just the ticket. I'll read that and it'll put me to sleep, and maybe something'll happen.' I started reading it, and it turned out to be a book by James Coleman called, *Foundations of Social Theory*. There was a chapter in there on a concept I'd never heard of before: social capital. I don't want to say that it was like Paul on the road to Damascus, but it was a little bit like that. James Coleman was not writing about Italian local government in the slightest, but he was writing about the importance of social networks, and why that could have really positive effects. He called those networks, and so do I, 'social capital'. There's a sense in which, before I went to sleep that night, I had seen, essentially, almost all the work that I would do in the next 25 or 30 years of my life. All the other books you're going to ask me about are about social capital in some way. I walked into the library never having heard the term before, and I walked out saying, 'What an important idea this is.' Of course, I didn't actually know all the books I was going to write. Even that story, there's a lot in it that involves not me,

but involves Bob Axelrod, for example. If Bob had not been beating up on me for 20 years, and if Bob and a couple of other people, Ken Shepsle and others, had not taught me a lot about game theory, my mind would not have been prepared when I walked into that library that night, to perceive what otherwise would have been a soporific book.

There was another part of the episode that is maybe relevant here. Within a couple of weeks of that encounter, I was wandering around late one night, and went to Blackwell's bookstore, which is right on the trail in Oxford. There was a historical atlas lying on the table, and I was just idling through it. I came upon a map of patterns of social connection and civicness in Italy, in the fourteenth and fifteenth centuries. I'm pretty good at recognising patterns, but anybody would have seen, that map in that historical atlas was identical to the map that I had myself drawn about places that were strong and weak in Italy, places where you could get your mail answered from the local government, in 1970. And I thought, 'How likely is it that that's an accident?' That's when I first began to see that these differences in social capital are extremely deep. That part of the book that you remember is actually a direct, linear descendant of that rainy afternoon when I saw those two maps in Oxford.

**AL:** They're wonderful tales of serendipity. You then moved from looking at the stasis in social capital in Italy, to looking at the changes in social capital in the United States. First through an article for the *Journal of Democracy*, and then through *Bowling Alone*, which came out in 2000, and is still I think the book for which you are best-known. Did you know that *Bowling Alone* was going to be something big as you were working on it?

**RP:** No, absolutely not. I'll tell the connective tissue there very briefly. I came back from Oxford, and metaphorically, from Italy, having persuaded myself that I now did understand something about the roots of democracy, and that they turned out to be quite deep, historically. And at the time, as an American citizen, I was worried about what was happening to American democracy. Now that seems like, 'How could people not be worried about American democracy?' But at the time, it was slightly controversial, counter-cultural. This is the immediate aftermath of the fall of the Berlin Wall. It was an era of triumphalism, and I felt that there had been a collapse in the effectiveness of American democracy. Certainly, if you asked Americans, when I was growing up in the fifties, 'Would you say you can trust the government to do the right thing?', the answer to that question was something like 75 per cent of people say, 'Yes, you could trust the government.' By the time I returned from Oxford and Italy, that figure's

about 25 per cent. So, a huge change, basically, since I started to vote. When I started to vote, everything was great, and then the place fell apart. Like a good social scientist, I was wondering, 'Well, what could explain that?' Because of the way things were happening at the time, I said to myself, 'Well, I wonder if there's any connection between what I've been studying in Italy, namely social capital, not change but differences in social capital, and what I'm worried about as a citizen, namely that American democracy's been falling apart.' I wonder, could it possibly be that there has been some change in American social connections, social capital, social networks over this period? Initially, it was a quite random kind of thing. I saw a newspaper story that the parent-teacher organisations in Lexington, Mass, where I lived, were having trouble getting members to come. And I thought, 'Hmm, that's interesting.' It was one of these strings. You kept pulling the string. I had no idea when I started that, not even a vague hunch, as to what I later on discovered. Which is basically, it's true that it all began when I started to vote. What had happened was, for reasons that we then spent a lot of time trying to figure out, all sorts of social connections in America basically had collapsed in the 30 or 40 years between 1965 and 2000. So I had stumbled, again, blindly into what I think now was a big deal. I went off and gave a talk, a very obscure academic talk in Sweden, and I had to think of a title for it. A friend of mine here at the Kennedy school, Jack Donahue, had learned a little bit about some of the evidence I was finding, and some of the evidence was that people were no longer bowling in leagues as much. He said, 'So you're finding that people are bowling alone?' I remember when he said that to me. I'm not very creative, but I know a good idea when I hear it and I thought, 'Oh, what a nice title for this obscure paper that I'm going to give.' So, I gave the paper, and some even more obscure academic journal, the *Journal of Democracy*, said, 'Would you publish that?' And I said, 'Sure, why not?' And then, it was like the world blew up on me. It was picked up by a couple of, at the time, the leading political commentators in America, George Will on the right, and David Broder, a famous progressive commentator. And both of them said, 'It's terrific. This article's terrific.' Then from that, basically, within two weeks of that, the White House called me to say, would I come to Camp David and talk to the President and his cabinet about this? Two weeks later, Rosemary and I were featured in *People* magazine. I mean, we're just ordinary folks, right? I went from one call from a journalist every year, to one call from a journalist every hour. It was like, 'What in the world is going on, and what do I do about this?' And then, you have probably noticed this too as you become even modestly famous, that you're going to be subject to more criticism. You should be, of course.

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You should be, but it's not what an ordinary academic with one journalist call a year deals with. Then I suddenly realised, 'Gosh, I hope I'm right about this.' I had decent evidence, but it wasn't perfect evidence. A lot of people quickly reminded me that I didn't have perfect evidence for this article, and so I spent three or four years checking to see, 'could I be wrong here?' It was actually a personally, deeply depressing period, because I thought, 'I have made some dumb mistake here and the whole world is watching me plummet.' But it turned out I was right after all, and the more we investigated other data sets, the more it turned out I was really right. I was more right than I thought. You cannot imagine how surprising it was to me to go through these big sweeps of being in *People* magazine and the President calling me, to figuring that the whole world understands that I'm a complete fool, to discovering, 'Actually, I'm not such a fool and I was basically right.'

**AL:** Following the book, *Bowling Alone*, coming out, you're very much a public star as well as being at the apex of the academic tree. You then begin working on quite a controversial topic: the interplay between social capital and ethnic diversity. That's something which you were working on as early as 2000, but it wasn't until you received the Johan Skytte Prize, the

Nobel Prize equivalent for political scientists, in 2006, that you finally announced those findings. You were criticised by one journalist who said, 'Academics aren't supposed to withhold negative data until they can suggest antidotes to their findings.' Do you still think it was right to hold back on those controversial findings until you'd settled in your own mind how to put the problem right?

**RP:** Actually, you're right about that journalist's comment, but you're wrong about what he meant by it. And if he were here, he'd correct you.

**AL:** That's John Leo we're talking about?

**RP:** Yes, and in the *Financial Times*. He had come to a talk I gave on these findings in Manchester, and as I was walking up to the stage, he said, 'How long have you been working on this project?' And I said, 'I've been working on it probably three or four years.' And he said, 'Why are you only now talking about it?' And I said, 'Well, I wanted to be sure I had the facts right, because if I'm going to go out and say something serious that has not just public implications, but controversial implications, I wanted to be sure I knew what I was saying.' He quoted me as saying that I withheld publication until I had a politically correct answer. That criticism of his was not that I had published, but that I'd withheld publication, according to him, because of political correctness. That I had withheld publication until I could come up with some politically correct solution to the problem. Which wasn't true. It was factually false. He later on had to retract that part of it. Actually, as soon as I found the findings – they were part of a larger study – we had made a press release and I had issued statements, public statements, and spoken to public audiences about these findings. So, I was certainly not covering up what I admit was a finding that was a surprise to me, and not pleasant.

The backstory is I had gotten into this because we had done a big national survey of places that had high social capital and had low social capital. And what we'd found was that the places in America that were most trusting were also the places that were most homogenous – ethnically homogenous. Descriptively, it looked like the more ethnically diverse a community or a neighbourhood, the lower the social trust and lower social capital.

So that was the basic finding. That basic finding, contrary to the claim of the right, was not withheld for political correctness. Diversity is great. It has many advantages. Immigrant countries like ours or yours, most of our Nobel Prize winners are immigrants, not native-born folks. Most of our leading artists are immigrants or children of immigrants, not native folks. Diverse groups are more productive, not less

productive. So, it's clear there are big advantages. It's also clear from our work, I thought, and some other people's work, that in the short run, doing diversity is difficult. That is to say, it's not like a whole lot of people from all over the world and different religions, they all suddenly begin hugging each other. They don't. In the short run, there's a collapse, a fall in social trust and social connectedness. As I said, summarising those parts of my findings, diversity brings out the turtle in all of us. All of us hunker down when we're in the presence of new diversity. So, the first point is that diversity's good. Second point is that it's not easy in the short run. And the third point is that you can do it in the long run. Successful immigrant societies have always learned how to manage diversity, not by becoming the same old monocolour places they once were, but rather by developing a new sense of 'us', a more encompassing sense of 'we'. So it's not that when Italian-Americans or Jewish-Americans or whatever came to America, they had to stop being Italian. We had to get used to Italians being part of America. So, our cuisine is much better, and because of the arrival of the Jews, our humour is way better. Americans, historically, did not do well on humour, but we add all those Jews and we suddenly dominate the world, at least in film humour. And that wasn't because the Jews had to stop being funny before they counted as real Americans. We added funniness to our repertoire of traits. The examples here are so frequent and obvious that I always get a little frustrated that I have to explain to people. It's not that you get past the short-run effects of diversity by having those people become like us. It's creating a new sense of 'us' with them. The left doesn't like the middle point I made about, 'doing diversity is difficult', because they want to say it's not difficult. And the right doesn't like the thing I said at the end, which is that you can work it out and you're better off afterwards.

So, the right wing in American politics – David Duke, the head of the Ku Klux Klan, had me on his webpage saying, 'Harvard professor finally says diversity is bad', which is not what I said, but when I made clear that that is not what I said, then I became the target of all the right wingers. The whole case actually went to the Supreme Court, for goodness sakes, and I had to file a brief in the Supreme Court. Bob Putnam filed a brief in the Supreme Court saying, 'These right wingers who are trying to oppose immigration are knowingly misinterpreting me, because they're cherry picking out the one part of that argument they like, and denying the other part.' That was the most disturbing criticism of me, because it had me in the wrong part of the universe, basically. There's been less criticism, but somewhat more criticism from some on the left who said that maybe I had misstated even the short-run problems. Maybe I had somehow made up the short-run problems, and that if you do the math right,



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it turns out that instantly, when strange people arrive next door, everybody goes over and hugs them... So that line of argument would have been that I got wrong the middle of these two points. As it turns out now, there now have been more than 100 replications of that work all over the world. There's been stuff done on this in Australia. There's been stuff done on it in Britain, in New Zealand. I mean, every place in the world, there's now been studies saying, 'Is Putnam right or wrong? It's great. This is the way science is supposed to work. I never, for a second, thought that the way science works is, 'I discover the truth and everybody bows down.' Science works when I say what I think and then somebody else says, 'Yeah, but you got this wrong.' And then other people say, 'Yeah, but maybe you didn't get that wrong.' There is just about to be published a review of the 150 studies that have been done, which you can read yourself. But as I read it, and as they say it, 'Putnam is basically right about, in the short run, diversity is bad.' I don't like being criticised any more than anybody does. Maybe politicians like being criticised, but I doubt it. So, I didn't like being criticised, but I didn't think anything of it. I thought it was unfair for people knowingly to distort my argument, which is what the right wing did. But the academic criticism, that goes with the turf.

**AL:** So, you then moved to another fascinating aspect of American life in your book with David Campbell, *American Grace*. It's a 700-page book, published in 2012, and reflects one of the things that strikes me as most interesting as an Australian coming to the US. At the end of World War II, a third of people in both our countries attended church on a weekly basis. Now it's down to only about one in eight Australians, but it's still only a little under a third in the United States. As you point out, Americans surpass Iranians in their zeal for religious attendance. To what extent was your interest in the topic of religiosity and religious tolerance grounded in your fascinating religious story, your conversion from Methodism to Judaism? A path not many others travel.

**RP:** As with all works, certainly with all of my works, there's a personal backstory and there's an academic backstory. The academic backstory, to begin there, is that as a rough rule of thumb, half of all social capital in America is religious. Half of all volunteering is religious. Half of all philanthropy is religious. Half of all group memberships in America are religious. I've always understood that religion was an important element in America's social capital, and I wanted to understand more about it. Moreover, it seemed like maybe this would be sort of bad social capital. That is, it was connecting people, but it was connecting with people like themselves. It was not about bridging. And therefore, as some of the so-called 'New Atheists' claimed, religion destroys everything. That's a common view. I didn't think that was true, because I thought there were really good things that religion did. But I also think there were bad things, and I tried to understand, 'What's the mix between the pro-social and the anti-social features of religion?' We had an opportunity to do quite unusually large and repeated national surveys, so we had some good evidence on both the ways in which religion was supportive, and the ways in which it was not. America, in world terms, is odd because we're very diverse religiously, and we take religion seriously, but we're surprisingly tolerant. Usually, if you put together diversity and religiosity, you get intolerance. Usually, you get Baghdad or Beirut or Belfast or Bombay or some awful civic fights over religion. We have fights over religion, but they don't get out of hand. That's the academic puzzle.

The personal thing was, I'd been raised Methodist and went off to college, and happened to encounter a really smart, wonderful co-ed, we called them in those days. We shared an interest in politics. We differed on policy because I was a Republican then and she was a Democrat, and we differed on religion. I quickly solved the first discontinuity because I had converted to being a Democrat, and wholeheartedly. The Republican scales fell away from my eyes. But converting out of a faith that I basically had been

practicing for all my life was not so simple. We spent a lot of time going back and forth over that, and at the time, it was extremely counter-cultural. Everybody on both sides said, 'Bob and Rosemary, you're wonderful people but it just never works if you have interfaith marriages.' Indeed, both her family and my family, they loved us but they were sure this was a life-altering mistake we were making. Fifty-fives years later, so far so good. We're doing fine. We've got two kids and seven grandchildren. I converted to Judaism, and both of my kids were raised as Jews. Both of them married non-Jews, but then one of their spouses, my daughter-in-law converted to Judaism 10 years later, and all my grandkids are being raised as Jews, they're all being Bar Mitzvahed. In Judaism, there's a certain minimum number required to hold a religious service, called a minyan. You have to have 10 Jews for a minyan. From one person, namely Rosemary, we have a minyan of our own that we've produced, so it's been great as a personal experience.

**AL:** Mazel tov.

**RP:** It also made me much more sensitive to what turned out to be important in the book. That is, that these networks of interfaith connections – especially marriage, but even just knowing somebody of a different faith – Americans do have lots of friends and, increasingly, lots of relatives, who are in some other faith.

The big story of that book, the secret of American success and the reason that we're able to tolerate such diversity, is we get connected with people from other faiths in a way that doesn't happen in Northern Ireland. At least, it hasn't yet. Maybe it will. That doesn't happen in the Middle East, and maybe it will, but it doesn't. And in America, interpersonal ties across religious lines enable us – indeed in some sense, force us – to be more tolerant.

**AL:** Your 2015 book, *Our Kids*, is a book about inequality. It's grounded in the story of the Lake Erie city of Port Clinton, where you grew up, and how it's changed over your lifetime. It doesn't just talk about inequality through the lens of money. It also talks about the challenge of parenting. There's a part of it that I think makes me, as a progressive, feel quite uncomfortable. When you look at the parents of the poor children from your childhood who were profiled, eight out of eight of those parents are there as the children grew up. Among the Millennial kids, it's something like two out of 12. Did that, delving into the impact of family structure on poverty, make you uncomfortable as you were writing the book?

**RP:** No. If we'd been talking at the Kennedy School when you were here as a student, there would have

been an ideological cast to the issue. Is the problem about poverty because of economic structure?

Or is it a problem about family structure? That's been debated ideologically, and still is debated, ideologically. But among specialists now, there's very little disagreement on two points. One, that family does matter. Basically, the argument that progressives like you and me had 15, 20 years ago, that to talk about family was to enter the territory of the enemy, that is, to take onboard something, 'family values,' that only conservatives talked about. That's not true now. It's virtually not true of anybody on the left, much less on the right. You look at the evidence, and it's just easier for two parents to raise a kid than for one parent to raise a kid. I don't care whether they're legally married or they're cohabiting or whether they're different genders. Having two adults, two loving adults, taking care of kids is just easier. And so, the problem is not to blame single mums. The collapse of the working-class family, which is not unique to the United States, is relevant to the growth of this class gap in America. I think that's no longer seriously debated by scholars. It's obviously still debated in the public arena. But among scholars of both the left and right, it's not. Secondly, if you ask, 'Well, where did that come from? Where did the break-up of the working-class family come from?' Most people, not everybody, but most people would say, 'Well, it's the economic change, the fact that the working class adults have taken it on the chin for the last 30 years.' You know the data on this as well as I do. In the US, and actually in many other places, the working class has had a really awful 30 years in which they've not shared at all in the prosperity of the country, and that for sure is relevant to their ability to maintain stable family relations.

Then the other side of this argument – but it's a much more narrowly bounded argument – would say, 'Yeah, but it's not just poverty, because we used to have poverty and we used to have stable but still poor working class families.' That leads to the thought that, 'Well, maybe something else has happened too.' For example, we had enormous poverty in the United States between 1932 and 1942 or '41, before the war, during the Great Depression, and it was heavily concentrated on the working class. And the rate of births out of wedlock did not change one whit, even though there had been a collapse of economies. Why was that? Because the birthrate went down too. Basically, not that there wasn't poverty, but the sort of moral rule was, 'No license, no kids.' Even though birth control was actually harder then, both births and weddings went down. What that implies was that was a period in which there was poverty, and it did have an effect on marriages, but it didn't follow through onto births, because people had a different moral set. I'm trying to explain why even the most progressive scholars now would say, 'Yes, the



absence of two parents, that is, the collapse of the working-class family, is part of the story. It does help explain why the opportunities open to working-class kids now are way lower than the opportunities open to rich kids, but not because they chose the wrong parents, but because their parents now are very less likely to be married, and therefore they're less likely to have two parents. And why are they less likely to have two parents? Partly for economic reasons and partly for cultural reasons.' So I knew that that was basically true, and our evidence showed that that's true, and one of the things that's striking, actually, both the reaction to that book and to the big public debate about equality of opportunity in America is, along some dimensions of politics, there's basic factual disagreement. It's like the two sides are living in different worlds.

In this area, which is crucial – equality of opportunity, the core value of America – there actually isn't a ton of disagreement about the facts, namely the growing gap between rich kids and poor kids, or even the explanation for the facts. Among the specialists, there's not. But the political elite – and here I would not be even-handed – the Republican elite, they know the facts and they've been ignoring them. I have talked

with Paul Ryan about this issue, and there's nothing that I've said that he says is wrong. He even says, privately, 'Yeah, we got to do something to help these kids. And of course, we've got to do something to help their parents economically.' Privately, he'll say that. But his behaviour has been completely inconsistent with that, and so now I've suddenly tip-toed into this mess of American politics. I know I'm sounding like a rabid Democrat, but it's the same me all along.

All along, I've been trying to be kind of a purple person. That is, see things from the right and from the left. And most of these problems I think are purple problems. And I've spoken easily, my whole career, to Democrat and Republican leaders, but now the Republicans have just gone off the deep end. I think it's likely, actually, that the American public is decent enough that a lot of people will say, 'This is a hell of a way to run a country.' Not left or right, but just where truth doesn't matter. How could you run a country in which truth doesn't matter? So, I admit this is now a little more based on faith in ordinary Americans than it is on facts. I think we'll come out okay, but I sure wish we hadn't had this detour.



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... this notion of creatives, that they come in two types: those who are grounded in a single big idea, who bloom in their early twenties, and those who draw their work from the world, who tend to bloom late.

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**AL:** I want to draw the conversation to a close with a couple of observations, one on the cycle of your career. There's this notion of creatives, that they come in two types: those who are grounded in a single big idea, who bloom in their early twenties, and those who draw their work from the world, who tend to bloom late. In novels, you think of Joyce as an early bloomer, Dickens as a character-driven late bloomer. Picasso is driven by single ideas, blooming early, Matisse coming later. Your best-cited work, *Bowling Alone*, was published when you're 59, and indeed, your productivity, if anything, seems to be increasing. What does it mean to be a late bloomer, in terms of how you see yourself and see your career?

**RP:** That's a good question. I haven't asked myself that question exactly. Because from inside, of course, it seems that you're the same you, turning out books and people either like them or they don't like them. From inside, you want to say, 'Well, it depends upon the fit between the ideas that I've had and what the demand out there in the world was for those ideas.' There's no doubt that *Bowling Alone* and social capital became really popular because it happened to be appearing at the time of the so-called third way, the incipient communitarianism of Bill Clinton, and then later, Barack Obama and Tony Blair. So, the ideas were in the air, and I just happened to be the guy who was articulating these ideas. If I'd articulated the same ideas two decades earlier, it would have been in the teeth of Reaganism, and that would not have flown. And if I'd waited another 20 years, the world would have moved on. So, it seems, from inside out, as though I'm just there, chugging out ideas, and

sometimes they have resonance with the world. But I can see a lot of ways in which my work was building on itself, and there's not a core concept. Or if there is, it's social capital. That appears much later in the story, as you correctly say. I'm in my fifties before I even heard of that idea, and I didn't come up with it myself. I just used it. Popularised it, maybe. But it is true that, throughout my career, I've been very interested in community. My very first article, written and published in my first semester as a graduate student, so that's now more than 50 years old, is still one of the most-cited of my pieces. It's called, 'Political attitudes in the local community,' because at some deeper level, I was driven by worrying about community.

This is psychobabble, but at some deeper level I think a lot of my career was driven by growing up in a place that had – objectively, we know this now – very high social capital. I happened to be growing up in a period and a place, no thanks to me, in which there was an extremely high level of trust and reciprocity and connecting and so on: the fifties in middle America. And therefore, I noticed when that reality of community began to weaken. Much of my career has been trying to say to other folks, 'Look, look!' And it seems to take the form of a kind of nostalgia for a world that we could never recreate. What I've been trying to say louder and louder is, 'No, no. It's true that it was like that then, and it's true that we've been on this downer, but it doesn't have to be, and we could turn it around, actually, and here are some ideas.' I'm writing a last book which tries to put all of these works into larger historical perspective, and talk about the relative emphasis on 'we,' which was high then, and the relative emphasis on 'I,' which was low then and is high now. The basic idea is, for the first half of the twentieth century, we were moving from an 'I' society to a 'we' society, and for the last 50 years, we've been moving more and more from a 'we' society to an 'I' society. Now, I'm not trying to say that all good is 'we.' There are bad things about 'we.' There's conformity and conformism, and maybe the tyranny of the majority and all that. So, it's not like 'we good, I bad' But for sure, we've gone too far towards 'I,' and so a lot of my recent work, a lot of my work over my whole career is basically saying, 'Look. This "I" kick we're on is actually not good for us. It's bad for our health. I'll show you the evidence. It's bad for our kids. It's bad for equality. It's just really, really bad.' And therefore, I say, 'Let's look at the time, which was 100 years ago, the Gilded Age, which was very much like this age. And we can see now, historically, that that was a turning point.' I don't mean that in the progressive era, everything became perfect. It didn't. But we've been on an 'I' kick for a long time, and we turned a corner and then, the next 60 years, we spent going in a 'we' direction. All I'm trying to say is, 'Let's look back and see, what did they do?'

**AL:** Couple of rapid-fire final questions. What advice would you give to your teenage self?

**RP:** I think this is going to sound like a preacher's thing. I look back at my teenage self, maybe all teenagers are like this, I thought, basically, I was in charge of my life. I was doing everything. I was working hard to get good grades and to play on the football team and all these things. And now, in retrospect, I can see, what self-delusions. I was entirely being helped along and pushed along and influenced by these social influences, and I didn't even realise it. I don't know that I would have behaved any differently, but I would have been a lot more thankful than I was at the time.

**AL:** When are you most happy?

**RP:** Well, that's a little unfair because I've got a terrific family. Really terrific. I mean, I married my college sweetheart, we're still loving each other and we have had a really, really, really good life in all ways. Both of us have been successful professionally. We both actually are more in love now than we were then, 50 years ago. We've got great kids who are doing wonderful things. We've been pretty successful. They're even more successful. And our grandchildren, don't get me started. We've got a picture someplace of Rosemary and me and our seven grandchildren sitting in the English countryside, Devonshire, celebrating our fiftieth anniversary, and we look like lords of the manor. I look at that picture and I think, 'Talk about happiness. That's bliss.'

**AL:** What's the most important thing you do to stay mentally and physically healthy?

**RP:** I try to get a little out of myself, because I think my natural state is being slightly depressed and disappointed in what I've achieved. I've had serious episodes of depression in my life, actually. Rosemary's important in that context, because when I'm feeling down, she kind of picks me up. And when I'm feeling up, she reminds me to call my mother or my grandchildren. That's really what I need. That keeps me healthy. I don't jog as much you do, or as I did when I was your age, but I still work out. I pump iron a couple of times a week. I'm really lucky. Look, a lot of this is genes and so on. I don't want to make it sound like humans are just chips floating on the ocean, brought hither and yon by their social and physical environment, but the older you get, the more you realise, 'Gosh, I am so damn lucky.' I ended up in this really nice state, and I didn't do anything right. I just was lucky.

**AL:** Time at your writing cabin in Frost Pond sounds like it's pretty important for your mental wellbeing too?

**RP:** Yeah, it is. Of course, I get teased by my family endlessly. I can't write here in the Kennedy School because there are just too many things happening all the time. So, when I really want to write, I go up to this cabin in the woods. Actually, it's not just a cabin. It's a nice house in the woods on a pond with the mountains in the background. And I write about how important connection with other people is. I've written about the same subject for 25 years. That it's really important to connect with other people. But in doing that, I go to where there's not another human being within a mile of me, except Rosemary if she's there.

**AL:** Your own Henry David Thoreau space.

**RP:** Yeah, and who are my friends when I'm up there? Well, it's the bear and the moose and the deer and the raccoons and the porcupines. Go figure.

**AL:** And finally, Bob, which person or experience has most shaped your view of living an ethical life?

**RP:** Honestly, I think my wife. You know Rosemary, although you don't know her very well. We're different people, quite different. She's a doer, so all those things that I preach about doing, she actually does. She volunteers in six different organisations, and worries about kids, and she worries about our own grandchildren. She's almost always doing what I preach we should all be doing, but actually I don't do. She has on our wall in the kitchen up in Frost Pond, in New Hampshire, 'When you're 100 years gone, no one is going to care what you wrote or how much money was in your bank account. They're going to care whether you did things for kids.' It's really emotional for me, because that's true. That's absolutely, morally, rock true. I'm lucky to have been around her.

**AL:** That's a beautiful way to close. Robert Putnam, social capitalist extraordinaire. Thank you.

**RP:** Thanks, Andrew.



## The Good Life

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# ON THE OCEANS, THE PLANET, AND THE PEOPLE

No ocean, no life

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**SYLVIA EARLE**  
SEAN CARROLL'S MINDSCAPE

*Interview by Sean Carroll*

*Illustration by Vaughan Mossop*

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**Sean Carroll:** Sylvia Earle, welcome to the Mindscape Podcast.

**Sylvia Earle:** It's so great to be onboard.

**SC:** You have a set of experiences that most of us don't have. Could you just share a little bit about what it's like on the ocean floor? You've spent time down there, and I think most of our audience have not.

**SE:** I think we are at the edge of the greatest era of exploring the blue part of the planet. I wish I could take everybody out, take the plunge, get in there. My mother actually waited until she was 81 before she put on a mask and looked at the ocean from the inside out. If she were here, she would say, 'Don't wait until you're 81, but if you are, it's not too late. Dive in, go see for yourself. The joy of getting to see that the ocean is alive, it's just full of the most wonderful creatures. On land, it's pretty exciting if you see a wild bird up close.

But in the ocean, wild things come and look at you all the time. They're curious and then they're abundant. Fish go out of their way to come and see... who are you? What are you doing down here?'

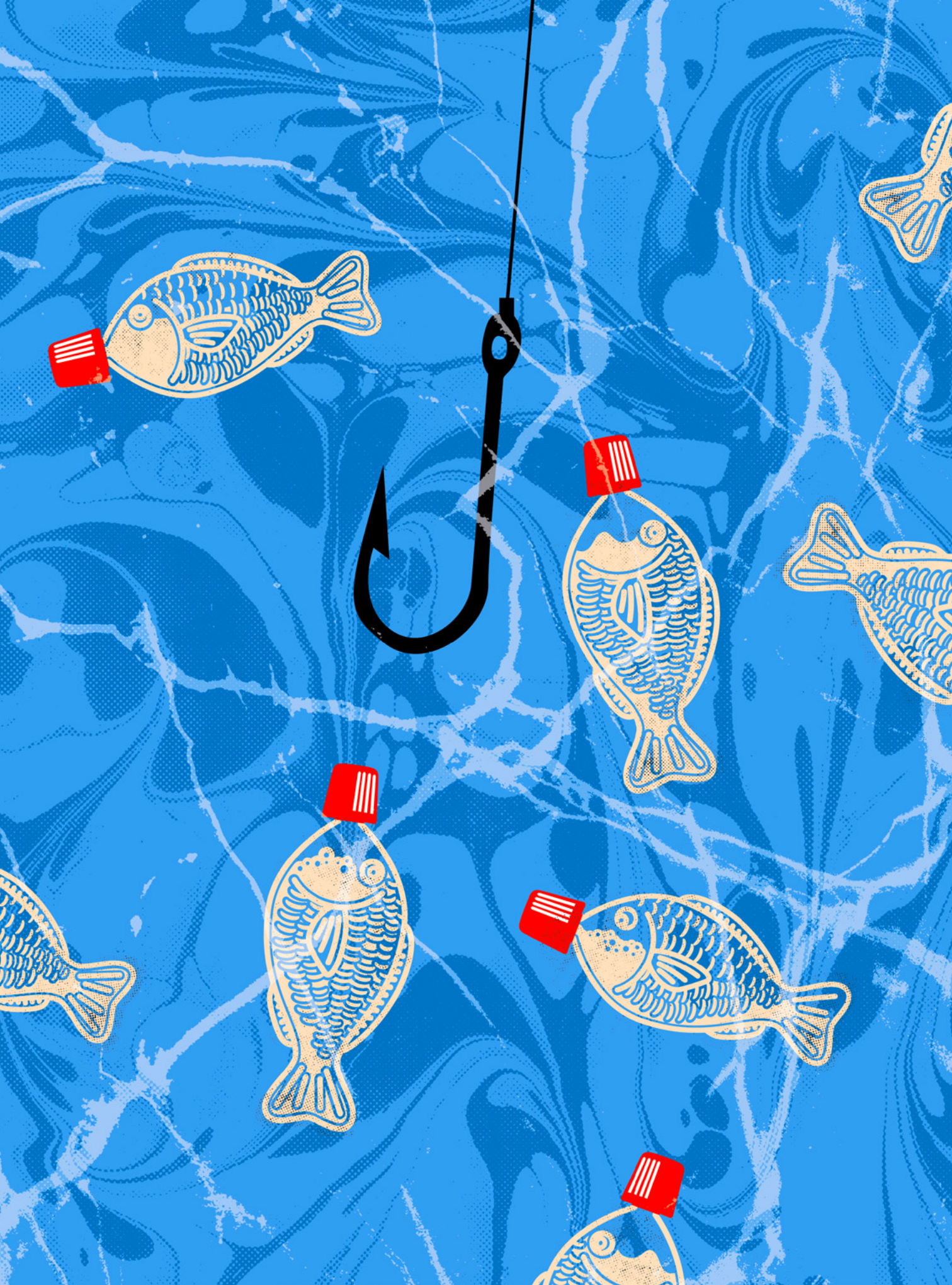
**SC:** At the practical level, do you have any advice? I have never done this, I've really never gone below swimming.

**SE:** You mean not yet.

**SC:** Not yet, exactly right. So, what should I do if I wanted, without making a lifetime commitment as you have done, to experience what it's like there?

**SE:** Well, a good first way to take the plunge is, as my mother did, with a mask that fits so that it doesn't leak. And if you wear glasses, there are many ways to get an insert in a face mask that enables you to see as clearly under water as you do on the land. That's the number one priority – get a good face mask. After that, flippers help. They enable you to swim faster, even in a swimming pool. You could practice in a swimming pool and see how you can move with greater speed and dexterity if you have them. Again, it's nice to get some that really are comfortable on your feet. And the snorkel, it takes a little getting used to – getting used









Photograph: Talia Cohen

to having something in your mouth that you breathe through. You put a snorkel on so you can keep your face down and breathe through the snorkel which projects out of the water. It seems a little awkward at first, but it doesn't take long. But then if you want to go to a little bit deeper and stay a little bit longer, try scuba. There are scuba shops all over the country, all over the world, that will take pleasure in introducing you to what it's like to breathe on the bottom of a swimming pool then in the ocean.

**SC:** At the other end of the technological spectrum, once we get to the scientific research, etc, what is state of the art for how we are exploring both the ocean and the ocean floor?

**SE:** I love getting into a little submarine that enables people to go, well, technology now exists to go to the deepest part of the ocean, which is as deep in the ocean as people fly high in the sky on a commercial aircraft: seven miles or 11 kilometres. We now have

the capacity to get anywhere in the ocean, at least for a while – hours, not weeks. But living under water is another tool that is available. I've stayed under water in an underwater laboratory now on 10 different occasions, and literally, you can live under water for days or even weeks at a time, so you become part of the system, day or night, you can go out and visit with the creatures who live there.

**SC:** Are there ongoing underwater laboratories in operation now?

**SE:** Back in the 1970s, when I first tried an underwater laboratory, there was an expectation that there would be a lot of them going forwards. Actually, that dream has not come true. But there is Aquarius, the underwater laboratory that is down in the Florida Keys. Where Aquanauts can spend days or even weeks at a time. Astronauts actually train there to see and experience what weightlessness is like. Of course, you can simulate that yourself with scuba. You

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can stand on one finger, you could be like a ballerina doing back flips and not feel the least bit of stress in doing so.

**SC:** And is Aquarius mostly a scientific research institution?

**SE:** I would say that all of my time under water has been useful scientifically. As a scientist, I'm always on full alert. I just want to know everything about everything, the way little kids want to know everything about everything, and then to share the view and communicate not just with my fellow scientists, but with the rest of the world. But on the other hand, every dive is also a pleasure. It's not exactly recreational, but it certainly is fun.

**SC:** There's clearly an analogy that you've already mentioned between space exploration and ocean exploration. As a cosmologist, in part of my day job, I'm much more familiar with the space side of things. Is there a similar debate with ocean exploration as there is with space exploration about human-centred exploration versus robotic or sensors in the ocean? How much data are we collecting just through remote sensing rather than actually sending people down there?

**SE:** Well, I'm intrigued by these questions about, 'Do we really need to have humans up in the sky? Do we really need to have humans down in the ocean?'

I think the answer to that is a resounding, 'But of course.' We need all of the ways and means available to us to experience and explore, whether it's going up or going down. There are advantages to having robots that never get tired, although they do wear out. And they need maintenance, but they generally have longer endurance. And if you lose a robot, it's kind of no big deal, it's a dollar loss, but it's not a human life loss. But the difference between sending a camera and an instrument, and actually being there yourself, is huge. We under-rate perhaps our ability to be surprised and our ability to follow a hunch. You see something out of the corner of your eye and you turn and go check it out.

A programmed robot cannot do that. Even with a remotely operated system where there is a human in the loop, driving the vehicle just like the Mars Rover had human operators and observers looking through the camera eyes of the rover. That's still not the same as actually being there. I sometimes make an analogy, 'It's one thing to be at a fine restaurant, dining, drinking the wine, having a conversation, whatever it is. It's another to send a camera.'

**SC:** Maybe you can give our audience a feeling for the ecology of what it's like under water. We have an intuition or an experience here on earth that there are forests, there are deserts, there are different kinds of climates and different kinds of terrains. How similar is it under the ocean? Are there deserts where there's nothing on the ocean floor? Or is there life everywhere there? Is there more aquatic life near the land and so forth?

**SE:** From the surface, the ocean looks pretty much the same today as it did throughout the whole previous history of the ocean. But once you get under the surface, the one thing that strikes you is there's life everywhere from the surface to the greatest steps. It's only in fairly recent times that we've been able to verify the existence of life from the surface all the way down to the bottom. Even beneath the bottom of the ocean where water trickles down through cracks and crevices in the ocean floor. And microbes live as much as a mile beneath the bottom of the ocean.

But of course, there are also big things in the ocean. The biggest creature that has ever lived as far as we know – blue whales. They're ocean creatures adapted for life where their great bulk, their huge bodies, as much as 100 feet long, can be lifted – buoyed up is the right word I guess – in the ocean, suspended in the sea. They'd have a hard time moving that much bulk on the land.

**SC:** So, if I were to take a boat a 1000 miles in a random direction in the Pacific Ocean and bring my little submarine and go all the way down to the



bottom at a random spot on the Pacific Ocean floor, there would be life hanging out?

**SE:** Absolutely, absolutely. Where there's water, there's likely to be life. There can be water without life, but there's no life without water. The fact that everywhere we've looked in the ocean, there is microbial life, and if you look at a big chunk of ocean, you'll see big chunks of life. It's not just rocks and water out there, it's a living system. I think it's exciting that all these things are connected. We're connected to it too. If we think that we're not a part of the living ocean, just ask yourself: where does air come from? Where does water that falls as rain and sleet and snow, where does it come from? Well, it's the water cycle. That most of it evaporates from the surface of the ocean into clouds and then falls back on land and sea. The oxygen cycle, where does it come from? Well, it has taken living systems, photosynthetic organisms, mostly in the ocean. Before there were trees and ferns and mosses on the land, there was life in the ocean.

The small things, the little guys that do the heavy lifting over many millions of years, and they continue right up to the present moment, generating oxygen, capturing carbon, really an important part, not only, of the oxygen cycle, that makes it possible for us to breathe and for large animals everywhere to exist, but also capturing carbon and generating food. We're now able to link as never before the role of living organisms, of course on the land, but especially in the ocean, to climate, all of the carbon. Where is most of the carbon? Well, most of the living part of the planet is ocean, in the carbon cycle, driven by photosynthesis, capturing carbon dioxide out of the atmosphere, converting it to sugar, converting it to food. It gets converted to zooplankton – food for them that, in turn, become food for little fish, that become food for bigger fish, for whales and for some of us. And we're all carbon-based units, too.

**SC:** So, the ocean plays a huge role in the carbon cycle. I want to get this right, because I'm not a biologist, not an ecologist. It's not the ocean water, it's the life in the ocean that is converting carbon dioxide into oxygen? Is that right?

**SE:** Carbon dioxide and water yields sugar, and oxygen is a byproduct. It's the simple photosynthesis formula that kids are learning this early in their education.

But when you think in the history of humankind, the knowledge about what air is – mostly nitrogen, about 80 per cent, about 20 per cent oxygen, and just enough carbon dioxide and other gases like helium and neon. And things you don't want to know

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If we think that we're not a part of the living ocean, just ask yourself: where does air come from?

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about that come back to haunt us: microplastics, nanoplastics, things that we have generated. These synthetic materials serve humankind very well, but when we throw them away, they don't go away. They stick around like the fishing nets that were produced out of these new light materials back in the 1960s. When they get lost or discarded, they don't go away. They're still out there clogging the ocean, killing things. And when they do break down, they still don't go away right down to the molecular level. There are tiny fragments, nanoplastics, that are really too small to be seen, except with a microscope. They are light enough so that they get lofted into the atmosphere. We find it in the water we drink, we find them even in the air we breathe.

**SC:** What is it that in your mind we don't know about the oceans that is most important to know? What are the big scientific agenda questions in learning more about the oceans?

**SE:** We still are at the edge of the greatest era of exploration ever. But I think from a human standpoint, our existence is dependent on the existence, not just of the water in the ocean, but the fact that it's a

living system, it's the living ocean that makes life on earth, land and sea, both possible. That includes us. No ocean, no life. No ocean, no us. One of the things that I really value about the terrible 2020 year of the pandemic, was a time when I was able to sort kick back and reflect on the questions of the sort that you're asking, and to try to gather information. What do we really know? What don't we know about the ocean? And incorporate that in a series of sea stories, if you will. The story of the ocean in a book that is just coming out. Actually, until right about now, we couldn't do what is now possible – to connect the dots to see how one thing relates to another and really try to answer that question. So why should we care about the ocean? What has the ocean ever done for me? It keeps you alive. That's a starter. 'Thank you, ocean.'

**SC:** Yes, but then what don't we know? So again, if I talk about space or physics, I can say we have this particle accelerator or this spacecraft going to look for life. What are the big science projects that will hopefully teach us new things about the ocean in the years to come?

**SE:** Looking for life in the ocean is a big one. There was a 10-year project called the Census of Marine Life from 2000–2010 where scientists – thousands of scientists from around the world – made a point of trying to look at museum records, of old whaling logs, scientific notebooks that are gathering dust on the shelf. To try to mine all the bits and pieces of knowledge that we're sitting on and pull it together to know something about what we have known, and what was known about the ocean in times past. And then at the same time to deploy ships to explore the current state of the ocean and further to imagine the future of life in the ocean. To try to answer that question, what don't we know? And I think the answer to that is just about everything. We were just scratching the surface. While that 10-year effort really was a giant step in terms of getting to know more about our neighbours who live in the ocean. What do they mean? What do they do? I think that the fact that we have found more species of animals, mostly insects, on the land than in the ocean. There are about 15 major divisions of animal life that occur on the land. When you think or most people when they think animals, they focus on vertebrates.

**SC:** Yeah, sure.

**SE:** You think cats and dogs and horses, and sometimes you remember to include people with vertebrates. Fish are vertebrates too, and frogs and lizards. But the great majority of life even on the land are creatures with no backbones, the invertebrates –

spiders, earthworms, snails and, of course, all those insects. But in the ocean, all of the major divisions of animal life are in the order of 35 categories. They are distinctive enough that they get a distinctive status of phylum. Nearly all categories of life are in the ocean, only about half have some representation on the land. We know no starfish on the land or in fresh water, but there are lots of them in the ocean. The diversity of life in the sea is just staggering. And the abundance too. Where there's water, there's likely to be life, and we're the odd ones, we live out of the water, most of the lives on earth live in the water...

**SC:** You've already mentioned nanoplastics. How is the set of living beings and the whole ecosystem under the water being altered by our activities?

**SE:** Well, it's a question that is front and centre of the minds of scientists right now. So now we know we have 'plasticised' the earth one way or the other. Think of all the ways that we use plastics – in our computer systems, plastic bags, plastic cups, you name it. It's hard to move anywhere without encountering one or many of these synthetic materials. But they don't go away; that's part of their usefulness. They're durable and, relative to many other substances, they're considered to be inexpensive. But they are not when you put the real cost of their existence on the balance sheet. What do we do with them once they've escaped into the ocean?

There's a cost to recovering them. A cost that we're just beginning to try to factor in. What are they doing to us? It's one thing to get entangled in plastic. Hundreds of thousands of seabirds, turtles, dolphins, whales, seals, sea lions, otters and, of course, fish and this great spectrum of invertebrate life gets tangled and killed by the debris. Also, when a turtle eats a plastic bag, it's not very good for it. Whales are coming ashore stuffed with, in some cases, hundreds of pounds of plastic that they maybe not deliberately, but incidentally have taken in. When they eat a fish that's tangled in plastic, that plastic goes inside the whale. That's one example. Another concern is chemically what might be happening to the creatures who engulf the nanoplastics or the microplastics or the big chunks of plastic. Sometimes big chunks displace enough of the space in the stomach of a creature that they literally starve because they can't get enough space on their stomachs to hold nutritious food.

There are places where seabirds nest, where the little birds hatch and the parents go out to sea and they pick up things that look nutritious and bring them back and feed them to their babies. And the babies get so stuffed with bits of plastic that there's no room for food, and they simply die. You see little piles of fluffy feathers where a baby seabird has consumed

so much plastic that you see feathers surrounded by piles of this plastic stuff. We don't have a real answer yet about the impact on human health, to inhaling or engulfing nanoplastics or microplastics that now appear in the air, in water, in the coffee you drink, in the beer, whatever it is. Wherever there's water. It's a scary thought, but the actual impact is simply a question mark. I mean I think it's probably safe to say that if you have a choice, you'd rather not be taking in these bits of material that don't exist in nature, but now exist in us.

**SC:** What about the impact of overfishing or other sort of commercial farming of the sea? My vague impression is that we've killed off a lot of the stocks of fish and shellfish and so forth, but what is the situation there?

**SE:** That's one of the things that I dived into, in my year of deep thinking, and trying to articulate it in a positive way for the National Geographic book it's *Ocean: A Global Odyssey*. The first part is literally about the story of the ocean, how did it come to be? And how did life in the ocean come to be? How did we come to be? But then transitioning to our role, the role of the ocean and climate, the role of ocean as a source of food and products, the way we used to look at whales as pounds of meat and barrels of oil. But we've shifted and I've been a witness to the shift. I served for a while when I was Chief Scientist at NOAA, I served on the International Whaling Commission before the agreement came into place to put a moratorium on the commercial extraction killing of whales. I've witnessed this change. I mean whalers were heroes and whales were the product of something that people valued, for money and the source of food. Now we look at them as societies, as treasured fellow creatures with families, with personality, with language. We think of them in a totally different way now that we know what we know that we could not know before.

**SC:** Have these efforts been successful? Are the whale populations recovering from that over-fishing?

**SE:** Some of the whale populations are recovering. The gray whales in California and Mexico going up to Canada, they have significantly rebounded from where they were at the low point when it was thought, with a few hundred of them remaining, that they might just disappear. But they have come back so that they're now thousands, not hundreds.

**SC:** That's something.

**SE:** The biggest threat now is not that we spear them or harpoon them, but rather that we are taking

their food. There are some skinny whales out there because we are competing with them for food. And also because they get tangled in the junk that we throw into the ocean. Also, ocean chemistry is changing because of what we're putting in and what we're taking out. The ocean is not as safe for them or for other marine life today, as it has been in times past. But I think the good news is we can see the cause and effect. We can see that there are fewer sharks in the ocean now by a lot.

**SC:** What about tuna and salmon and other common food fishing? Have we brought that overfishing under control? Or is it still getting worse?

**SE:** No, oh my goodness. Ninety per cent of the sharks are gone in some cases, like the oceanic whitetip and the shortfin mako, they're down to half of 1 per cent of what they were when I was a kid. We're really good at killing them, and that's disrupted not just the food chains of the ecology of the ocean, but the chemistry of the ocean, the carbon cycle is disrupted too. Because carbon is part of that cycle, nutrients are given back by every living creature, every animal gives nutrients back, whether it's a whale or a shark or a tuna. When we take so many of them out of the ocean, we alter the chemistry of the ocean, and that ultimately comes around to the oxygen that's generated, the carbon that's captured. But more than that, the excess carbon dioxide in the atmosphere has turned to carbonic acid in the ocean. Excess carbon dioxide in the atmosphere is driving the warming of the planet. That's one category of whoa. But the other is excess carbon oxide in the ocean is turning the ocean more acidic. Again, changing the chemistry.

The numbers for bluefin tuna in the Pacific were down to about 3 per cent of what was there in 1970. In the Atlantic, it's a little better, perhaps maybe 10 per cent of the bluefins in terms of their numbers as compared to what was there in 1970. I remarked on this when I was at NOAA as the chief scientist.

Somebody has to speak for the fish, because most people don't know. They see an animal in the supermarket, they figure that somebody's looking out for their numbers and that it's got to be alright if it's in a restaurant. But the fact is, we have habits, customs and laws in place governing our behaviour towards the ocean as it was. It doesn't really necessarily fit the ocean as it is today. So much has changed so fast that it's a different ocean today than what it was when I was a child. In some ways it's good. We've got more whales, we've got more sea turtles because we started protecting them. But in almost every other thing that you look at, coral reefs are only about half remaining. Mangroves, seagrasses, populations of oysters that once were so abundant in New York. There is just a tiny fraction remaining in San Francisco Bay for lots



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of reasons, not just because we love to eat them, but because we've altered the nature of the ocean itself. It's not as friendly a place for life as we knew it and experienced it when I was a kid.

**SC:** In terms of the fish, especially tuna, swordfish, etc, what would you recommend that our policy be either individually or as nations in the world? It sounds from what you're saying that you would hope that we should pretty dramatically change our habits when it comes to eating seafood.

**SE:** I say give them a break. It's a choice. I try hard to think who on the planet really needs to eat ocean wildlife for sustenance because they don't have

many choices. There are communities, they are island countries, where it's not just a choice, it's their existence, their food sources. It's like bushmeat. There are people on the land who really rely on wildlife for sustenance. And in most cases, those who are in that category have had a peaceful relationship with nature over a very long period of time. They take but they don't take so much that the population that they rely on for sustenance collapses. Well that's not the state for most of the world and that's not the rationale for most of what is taken from the ocean. It's more about offering a choice, a luxury choice to people for whom Orange roughy, Chilean sea bass – many wild things that we take from the ocean – are either new on their menu or, in any case, they're not a need, they're a choice. And, usually, it's a luxury choice. The cost of choosing fish today is truly a luxury choice. Getting to the heart of the problem is that we regard wild things as free things. When you calculate the worth of wild animals, they are only valuable once you've captured them and taken them to market.

Then you can put a price tag on them. But swimming in the ocean, they're not only free for the taking, there's no cost except getting there and extracting them. There is cost to that but, curiously taxpayers, whether they know it or not, are subsidising the extravagant capturing of wildlife from the ocean. And there's a cost that we're just beginning to account for too, and that's called by-catch. That in order to have shrimp on your plate or tuna in your sushi or in your salad, there are many tons of other creatures who are caught in the process and are simply discarded using bottom trawls. Those big nets that scrape the ocean floor, for those who live close to the bottom – that's shrimp, they're bottom-dwellers, halibut, flounder, and many others as well, are captured in this way where you take everything. You take up everything and you shake out the few things that you want, and all the rest is just thrown away, spilled, lost. It's like bulldozing a forest to get the songbirds. And we condone that. We have been doing this now for decades. And we're paying the cost. The ocean is seriously disrupted just from this one form of capturing ocean low life, that not only is bad for the creatures they catch, but for this whole ecosystem that gets destroyed in the process. And we don't account for the loss. So, all of us are paying because we have an ocean that we need for our existence. Our health, our security is being torn apart because we simply haven't understood the real consequences. We thought the ocean was too big to fail no matter what we took out of it or however we took what we took. I mean consider what we did during the 1950s to test nuclear devices in the ocean. Blowing up whole chunks of ocean with all of the creatures who live there. Some of the most beautiful and productive coral reefs on the planet were simply vaporised. Well, we can, in a way, justify it as well:



Photograph: Dominic Spohr

it's war and it's security. Well, okay, we didn't know then as much as we do now about what real security means.

We also know what to do. The great positive thing is we know what to do. We need to make better choices about what we eat, how we treat the ocean. To use this remarkable time in the history of humankind, to apply what we now know that we could not know, not so long ago. That's the superpower of knowing, that leads to understanding and shifting in a way that will make us safe. We need a planet that really works in our favour, and we've had it through all my life. But when I think about my kids, my grandkids, or everybody's grandkids, if we continue the current trajectory of decline, their future looks pretty perilous. But we've got this little window right now. This is the sweet spot in time, because we're armed with knowing cause and effect.

To know that everything connects. We can't get away with bad behaviour anywhere without it affecting everywhere. So, fires in Australia affect me here in California and vice versa. Fires in California affect the whole planet, because everything connects and good behaviour connects too. So, when we

protect, with a national park, protect a water system, protect the fly ways of birds – birds are safer now than they were at some points in history because we value them and we're taking measures to protect them. We're beginning to understand that the same is true with fish. We can't feed ourselves with wild birds, songbirds. We'd soon run out if we all had to just eat songbirds. We're running out of fish too, why? Because we've taken so many so fast with industrial technologies that enable us to extract wildlife on this huge scale.

Of course, people one way or the other, will take life from the ocean to eat, but we need to think about how much, how fast and what methods are being used. Even with aquaculture, we've got to get much smarter about how we do that. Raising carnivores really doesn't make any sense. You've got a big fish like a salmon, what does it eat? It eats other fish that eat other fish that eat other fish, and you get down to plants, ultimately. So, cows are taking a big bite out of the ecosystem, even though they eat plants. But at least it's sunlight, plant, cow. Sunlight, plant, chicken. Sunlight, plant, sheep. Sunlight all the animals we raise to eat are grazers by nature. Most of the animals

we take from the ocean, the wild animals and even those that are being cultivated, are largely carnivores, and salmon is the number one example. Catfish? Better choice. They eat plants and they grow fast, unlike a tuna that takes many years just to mature and can live 30, 40, 50 years. We're eating these old fish that have accumulated whatever we've put in the ocean. The older they are, the bigger the fish, and the greater the likelihood they've got stuff in them that you probably don't want in you. And they're more valuable in the ocean doing their thing like wolves and lions and tigers, than on our plates. We have so many choices about what we can eat.

**SC:** I remember visiting the Monterey Bay Aquarium and they handed out these little cards which basically recommend, 'Please don't eat these, please do eat these,' but I guess I always thought of that in terms of how endangered the species were. But I hadn't thought of it in terms of where they are in the food chain, which is what you're suggesting.

**SE:** That's one of the bigger missions of guides about better choices – failure to acknowledge the age, the investment that goes into making even a little fish. A chicken that's been around for less than a year and goes to market has consumed about two pounds of plants. A tuna that gets big enough to go to market, has consumed, when you go through the food chain, fish that have eaten fish. How many tonnes of phytoplankton at the bottom of the food chain, capturing sunlight, turning it into food, goes in ultimately to making a tuna? We're talking thousands of pounds of plants for one pound of tuna. For a cow, it's about 20 pounds of photo-synthesisers to make a pound of cow, about two pounds for a pound of chicken. But any wild fish, but especially the big old carnivores, the top carnivores that we especially like to eat, whether it's a cod, or a swordfish or a 50-year-old halibut – think about an animal that has escaped all of the things in the ocean that have enabled it to get to be a 50-year-old halibut. A big old fish that then gets sliced and diced to become a little piece of meat on your plate, and you just eat it casually. If you do eat halibut, or tuna or swordfish or cod, do so with great respect, because it's taking a huge bite out of the ocean, and we aren't properly accounting for the cost no matter how much you pay for that wondrous seafood.

**SC:** That's a very good perspective, I think, the top of the food chain kind of thing. I do want to give us a chance to just say a little bit about climate change. I think probably most of our audience agree that climate change is real. It's largely caused by anthropogenic activities, and presumably it's bad for the oceans. But maybe less appreciated is the sort

of feedback element going on? That climate change affects the oceans, and the oceans affect climate change. I remember hearing very recently worries that the gulf stream might be disappearing entirely because of climate change. It's a very unpredictable system. Is there anything that you think that we should know that maybe we don't? About the relationship of climate change and the oceans?

**SE:** Scientists around the world who are addressing climate, are for the first time able to gather the information that's been accumulating now, for decades, that is enabling us to see what we couldn't see before. Connecting the dots, looking at patterns, cause and effect. One thing seems really obvious now that maybe wasn't so obvious when concerns about changing climate first began to make headlines, and that is, we're talking about a living system. Whether it's trees capturing carbon and sequestering carbon or phytoplankton in the ocean. That is doing the same thing – capturing carbon dioxide, generating food, releasing oxygen. Whether it's in the roots of a rainforest tree or a tree in your backyard, you're sequestering carbon into the soil. Mangroves are champion carbon sequesters, with their roots in the ocean and not only generating oxygen, keeping the carbon in place.

Now, think about the hundreds of millions of tons of carbon-based units, we call squid and shrimp, and tuna and swordfish and all the other creatures that we extract from the ocean. That carbon goes back to the atmosphere. Similarly, when you clear cut or burn a forest, what happens to the carbon? Into the atmosphere. That's bad, but what's worse is that the natural carbon capturing systems, that have shaped earth into a habitable place for life as we know it, are destroyed or diminished or corrupted one way or the other, and that has not really been acknowledged so much in the past. More with trees, than with the ocean, but now blue carbon is making headlines, if you will. The International Monetary Fund commissioned a study that was reported to the World Economic Forum in Davos in 2020, about the carbon capturing and sequestration value of whales to be in the order of a trillion dollars.

**SC:** Pretty good. That's real money.

**SE:** Just thinking about their other values, I mean we love whales, we love their songs, there's whale watching. All these intangibles. What's the value of a live whale compared to a dead whale? Well, a dead whale puts carbon back into the atmosphere. A live whale holds it in place and, ultimately, goes to the bottom of the ocean. That's how it has worked long before humans were around.

If you really want to understand climate, economists



follow the money, but scientists follow the carbon. Look at how the system functions. The Climate Conference in Paris was the first time that the ocean as a component of climate was acknowledged at all, before it was all about the atmosphere, it was all about the land. But now we know, because it seems obvious, the ocean drives climate, moves cold water, warm water around the planet, shapes the planet's climate. Without the ocean there would be no climate, effectively. We just haven't thought about it, now we are thinking about it. And now we're acknowledging not just rocks and water, not just the heat-holding capacity of the ocean, and not just ocean currents moving around, but the living ocean, the carbon in the ocean as a principal driver of the cycle of life of the climate.

We've also got solutions. If I were a kid, I'd say, 'Yes, this is my time, this is the best time ever, because I know what to do. Let me at it.

**SC:** To wrap up on an optimistic note. You do this instinctively. That was a very optimistic thing you just said. But let me just give you the opportunity to elaborate on the idea of protected areas under the sea. Number one, how does that work? The water just sort of flows into other areas of the water, so is it even feasible to protect areas of the sea? And number two, is it something we're doing or should be doing? Is it something we should be agitating for?

**SE:** The national park idea got under way early in the twentieth century. And late in the twentieth century, the idea of doing something comparable in the ocean took place first in Australia with the Great Barrier Reef Marine Park Authority to protect that amazing coral reef that borders the east coast of Australia. In the United States, about the same time a little place was protected around a shipwreck off the coast of North Carolina. Since then, around the world, nations have scaled up significantly the concept of protection of areas under their jurisdiction within exclusive economic zones. Countries have the ability to govern out 200 nautical miles. So, this country, the United States, is twice as big as what most people think, if you count the blue part. And some countries, little island countries, are 10, 20, 100 times bigger than the land mass, but it's under their jurisdiction. We're seeing some real progress, not enough, but the goal is 30 per cent by 2030, right now, it's about 3 per cent. Going back 20 years, it was 0 per cent.

**SC:** That'd be a huge change.

**SE:** If you count some of the areas that have some form of protection, like our marine sanctuaries, and places around the world that are managed, but you can still commercially fish and do a lot of other stuff,

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... the ocean drives climate, moves cold water, warm water around the planet, shapes the planet's climate. Without the ocean there would be no climate, effectively. We just haven't thought about it, now we are thinking about it.

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they're not really protected, but they're moving in the right direction, maybe close to 10 per cent of the ocean has some form of protection. But the goal by 2030 is full protection for 30 per cent of the land and the ocean... It's our bank account, it's our insurance policy against the natural ups and downs that will take place no matter what humans do. It seems like the smartest investment we could possibly make. Some are aiming for at least half of the world to protect our life support system. It doesn't mean we can trash the rest and get away with it

Of course, we will use nature, all creatures do. We will divert water for our purposes. We've already clear cut so much of the land. We ought to be re-using those places and restoring what we can to better health, including our own backyards. That's a good place to start for people... Look around at what's within your personal scope. You too can plant a tree. We have come to think of lawns as beautiful, but think about what wildflowers would look like? Natives.

Think about what a vegetable garden would look like. It's good for you in terms of what you eat. Good for the land, good for the air. I just get so excited about the things that we know we can do to make the world a better place. Nobody can do it all. But everybody can do something. So, it all starts with that individual you see in the mirror...

**SC:** Yeah. It's a very good message.

**SE:** If you aren't willing to step up, why would you expect others to carry the weight?

**SC:** It reminds me very much of a podcast I did a couple of years ago with Joe Walston, who was a conservationist. He had a very optimistic message – he thinks that if we put enough people into cities and protect enough of the land outside the cities, we can actually live in a happy equilibrium. But he stressed the point that there is a race. We have to get to the happy place before we destroy things to an irreparable, irrecoverable point. And it sounds like the same thing is true for the ocean, so I think that's a good call to action for everyone out there listening.

**SE:** I say celebrate. If you had to choose a time in all of history it would be fun to go back hundreds or thousands of years ago, or maybe to zoom forwards to see what it all turns out to be. But I think this is the best choice. You, we, all of us together are at a pivotal time, with what we do or fail to do. But I hope it's in a positive way, because we know that it makes a difference. We've seen the evidence. When we embrace nature with care, we get positive results. We get more whales, we get more trees, we have a better quality of air, we can restore better quality to the water. We didn't know the harm we were capable of inflicting in the past, but there's no excuse today. Now we know. And we should celebrate that. It really is our superpower. And it can save us.

**SC:** It can, and it is a superpower and it's a very good message. I can't think of any place to wrap up than that, so Sylvia Earle, thanks very, very much for being on The Mindscape Podcast.

**SE:** Well, thank you for having me onboard.



## Sean Carroll's Mindscape

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# MEASURING WORLD PEACE

What are the pillars of a peaceful society?

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**STEVE KILLELEA**  
ABC CONVERSATIONS

*Interview by Richard Fidler*  
*Illustration by Vaughan Mossop*

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**Richard Fidler:** There's this thing on the web called the Global Peace Index. And on its website, there's a map of the world that shows how much peacefulness the people living in each country can enjoy. It factors in things like violent crime, militarisation, civil conflict, how many people are in jail, the quality of its news information, access to weapons, political terror, etc. And it turns out that once you pull all this data together, you can get a real sense of where a country is going. Australia is in the top ten along with New Zealand, Japan and the Scandinavian countries. The countries at the bottom of the list include, not surprisingly, places like Russia, Afghanistan and Iraq. Also not surprising but still somehow shocking is how far the United States has slipped down that ladder. The Global Peace Index regularly makes headlines all over the world. The man who started it has twice been nominated for the Nobel Peace Prize. He's an Australian businessman named Steve

Killelea. Steve Killelea spent much of his early life surfing. Then when he got a grown-up job in his mid-twenties, he went into computing and started up an internationally successful business that left him seriously cashed up. He and his wife, Debbie, started a charitable foundation. But in order to get real, long-lasting results, Steve Killelea realised he had to think more deeply about peace, and about what that means. How it is that some places have enough of it to help them cope with change or disaster, and how it is that some places don't. Steve Killelea's book is called *Peace in the Age of Chaos*. Hi, Steve.

**Steve Killelea:** Hi. Thank you for having me on the show.

**RF:** I think your website's fascinating. I spent a good hour playing around with it and looking at the data in it. As I said, Australia's in the top ten, but Iceland is right at the top of the list. What's the secret of Iceland's success, Steve? What have you noticed about the place when you've gone there?

**SK:** You get a lot of jokes about Iceland, to be honest. Like, no wonder it's so peaceful. It's so cold, no one wants to go outside. In a lot of ways, that's very true. But if you take a look at the history of Iceland, you





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... the same thing which creates for highly peaceful society creates the background conditions for many, many other things which we want.

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can see the peacefulness going back 1,000 years. It's almost 1,000 years since they've had a major conflict in Iceland. Everyone used to come together in the centre of the island, a phenomenal place where you've got two tectonic plates meeting. And every year they'd have this convention, if you like, to determine the laws of the land. Because the place is so barrenly populated, you didn't have a government which could extend control, like an army or the police. It was up to the citizens to organise and create and follow the rules themselves. So, you have this history going back. Even up to 30 years ago, if you were in Iceland and you got stuck out in the cold, you could walk into someone's house, put the kettle on if they weren't home, and it would be quite acceptable. The reason for this is the environment was so cold, it forced people to come together and interact as a community. The lack of centralised control also meant that they had to act in ways which were pretty different to the way the rest of Europe went through the Middle Ages, and also the years after that. All these factors come together. A lot of the men would head overseas fishing, gone for long periods of time. They'd come back, sometimes after a year and find that their wives had a baby by another man – so they had to then blend all these things in as well. So, their background has created a highly peaceful environment.

**RF:** As it happens, Steve, Iceland's a place I've spent

a fair bit of time in over the last few years. Is there something you've observed first-hand?

**SK:** I knew nothing about it until I'd actually done the first Global Peace Index. After that, Iceland was very chuffed at being the head of the index, so I regularly got invited over there to speak. I've done a number of holidays through the country. I've now got a pretty good feel for it.

**RF:** Is it factors like this higher level of trust in Iceland that help it weather big events like the global financial crisis of 2008, which hit Iceland particularly hard?

**SK:** One of the ways of looking at it is through resilience, and resilience is something we all know and understand. The question is, how do you define what is a resilient society and what actually builds resilience? At the Institute for Economics and Peace, we've got this body of work called positive peace. We start with the Global Peace Index, and we've got about 50,000 different data sets, indexes, attitudinal surveys. And then we do statistical analysis on them to work out the factors most associated with peaceful societies. We use other mathematical techniques to clump it together and it comes down into eight pillars – the pillars of positive peace. These operate systemically, so it's very, very hard to pull one thing apart and say, this is what creates peace – like, let's build a trusting society and everyone will be peaceful. Obviously, we are a lot more peaceful with people we trust than we don't trust, so that's a given. But it's really the systemic nature of societies.

You need to be able to measure it and come at it from many different angles. I think that's the underlying thing. We started with peace, and the same thing which creates for highly peaceful society creates the background conditions for many, many other things which we want. Things like higher GDP growth. Volatility of inflation's about three times less. More foreign direct investment. So, there are all these economic things tied up with it. Similarly, we find that those societies perform better on measures of ecological sustainability. They have higher measures of wellbeing and happiness. So, in many ways, what we're looking for with this positive peace measure describes the optimal environment for human potential to flourish.

**RF:** Are you talking about a virtuous circle of things? Because I noticed in your report that the most peaceful countries are getting more peaceful, while the least peaceful countries you've measured are getting less peaceful. Is there some kind of virtuous circle/vicious cycle that can operate in these circumstances?

**SK:** Yes, that's exactly it. We talk about virtuous and

vicious cycles. When countries start to deteriorate, it makes them less resilient so they're more likely to fall into violence when they get shocks, it can be internal shocks or external shocks. Positive peace falls down, then the actual structures of society, the things which create for productivity and wealth fall away. Wealth falls away and they become poorer, they tend to become more violent. As that falls away, you also find that having an effective government starts to fall away as well. It all goes hand in hand.

**RF:** Whereabouts in the world do you particularly see this vicious cycle operating right now?

**SK:** The best way of being able to see this in the world today is the Sahel. The northern end of Sub-Saharan Africa, so that's places like Niger, Cameroon, Burkina Faso, the northern end of Nigeria and such. When you look at that, you have countries that have had three coups in the last year. You have levels of food insecurity of greater than 80 per cent of the population, so you haven't got enough water, haven't got enough food. The population in some of these countries is going to more than double in the next 30 years. For Niger, for example, it's going to grow 161 per cent. If you start to look at the positive peace, and it builds up within the society, you start to address all these other systemic problems. If we go into the Sahel, it's probably got the most active Islamist groups in the world at the moment, so a lot of terrorism up there. So, you need to look at the overall system to try and improve it. Now countries like Australia, we're in great shape. We don't think so. We're living here – we look around and see issues with our politics, for example. We can see issues with carbon emissions and we can rip our hair out. But on the other hand, compared globally, Australia's in a pretty envious position.

**RF:** Steve, when you stand back and take a look at the data over a period of time, has the world been getting more or less peaceful over the last 15, 20 years or so?

**SK:** If we look over the last 15 years, more countries improved in peacefulness than deteriorated, so it's something like 97 countries improved and something like 85 deteriorated. However, the overall peacefulness deteriorated by about 2.3 per cent. What we can see there when countries fall in peace, they do it more dramatically than they improve in peace, so improvements in peace happen very, very slowly.

**RF:** Violence is one thing, but what about the fear of violence, how does that play into it as a factor?

**SK:** Fear of violence pretty much matches the actuality of violence occurring within an environment. But people will feel a lot safer in their local area and

feel there's less violence than say, within their state, then within their country. Why is that so? When you analyse it, it comes back to, we know the environment around us best. The further we get away, the less we know, the more we're then dependent on the news.

**RF:** It's the bloody media, isn't it, Steve? If it bleeds, it leads. It's the bad news that's being flung at people through their TVs. They experience this profound mismatch to what they know is going on in their immediate neighbourhood compared to what has been flung at them through the screen on the nightly news.

**SK:** Exactly. Now when you look at the laws we've got on pornography, let's say, why don't we have similar laws on violence?

**RF:** Like I mentioned, the United States has slumped. And as you say, when one drops, it drops pretty hard. Do you think the United States has reached some kind of tipping point in recent years?

**SK:** Firstly, on tipping points, it's very, very hard to predict when a country will go through a tipping point. What happens with tipping points, you have events happening that just slowly build up to a particular point, then you have one or two minor events and it pushes it over a threshold. If we look at the Arab Spring in the Middle East, it's a classic example of that. You've got authoritarian regimes, you've got food prices rising, life is getting tougher and tougher for people. Then a street vendor in Tunisia sets himself on fire because he can't provide enough food for his family. And that then sets off the Arab Spring. No one could have picked out events. Now you can pick the resilience within societies and realise that there's an awful lot of force and coercion which keeps the peace, but it's a very artificial peace. Now let's come back to the United States and the tipping point. I don't want you to try and predict a tipping point. But if we look at the attitudes domain in the US, it's had one of the largest drops globally. That's things like misinformation. It's perceptions of corruption. It's another thing called fractionalised elites, where the elites within the society start fighting amongst themselves. The more they fight amongst themselves, the less likely they are to provide good management for the country. And also group grievances within the US are up as well. They're the things that we can all see in spades, it all gets reflected through the media.

Now, although it's dropped dramatically, the overall positive peace in the States is not what you would call low. But the US is well down the Global Peace Index, around 130 somewhere. That's because of a whole range of different issues. If anything, the theory would say they should improve in peace. But we noticed



that doesn't happen with your really big nations like Russia, US, India or China. There's something about the dynamics of being a superpower and having really large populations you've got to hold together, which makes it difficult. Where the US goes from here, it's difficult to see. I don't think in the next five years it will fall off a precipice. Certainly, the next set of elections in the US are going to be a bellwether. We need to watch that very, very closely. And that will, in many ways, determine the trajectory of the US probably over the next decade. Because if someone truly does stay on after losing the Presidential election, then that would be a cause for a truly different path for American democracy. You wouldn't have a democracy. You'd be moving towards more of a dictatorship.

**RF:** Steve, what does your research tell you about the state of democracy around the world at the moment?

**SK:** If we look globally, there are only 23 full democracies in the world. Places like, let's say, the US and France, they aren't full democracies. They are what are called flawed democracies. There are a vast number of countries in that. Now Australia is one of the places in the world where there is a full democracy. But if we look globally, democracies now have been on the decline for many years. However, contrary to most people's perceptions, the one area of the world where it's been improving is actually in Asia. South Korea now is classified as a full democracy, as is Taiwan and Japan.

**RF:** Steve, you've come a very long way. You grew up in Sydney's Northern Beaches. Does this mean you had that classic childhood in the 1960s as being a surfer, living that life on the beaches?

**SK:** I grew up on the Northern Beaches. I left school at 16 because I couldn't see the practicality of school and all I wanted to do was surf. I did a ton of surfing and spent quite a bit of time in Indonesia. In many ways, that's what really got me interested in developmental aid, as I was living on \$1 a day. I'd live with Indonesian families and be paying 40 cents for a room, then spending 20 cents a day on three meals and then surfing. The other expenses were trying to get to the places I wanted to surf. I got a clearer understanding of how poverty affected people. Then when I started to make money, I got interested in developmental aid, so I decided to work with the poorest of the poor.

**RF:** What did you see of poverty that made you think, oh, that's what it means to live in poverty?

**SK:** I was living with an Indonesian family and someone would get the sniffles, and everyone would fear for them because no one had any money for

medicine, nor was there much around. Whereas if we get the sniffles in Australia, we wouldn't even think about it. Any little illness, people really, really worried about. Remembering in Bali, for example, the main road from Kuta into Denpasar, which was the capital, used to flood a couple of days a month during the wet season. People would have to go up and stand on the roofs of their houses till the rain subsided and the floods subsided to go back into their homes. They're just unbelievable things. Child mortality rates were really high in those days.

**RF:** You were there surfing around the world in your early twenties. What changed when you turned 25?

**SK:** I think I grew up a little bit, didn't I? I was probably a late maturer when I look back on it, to be quite frank.

**RF:** It still sounds like a great life living for a dollar surfing all over the world...

**SK:** Yes. I got to 25 and I started to think, well, I've got to do something with my life. I just can't keep going like this. I really spent quite a bit of time, six months contemplating it deeply, and came up with three options. One was to be a social worker because I always had this desire to help people. The other was to take people on adventure holidays around the world. But I didn't do that because I figured by 35 I'd be too old. But in retrospect, that was wrong, I just would have created a business around it. And then the other one was to go and become a computer programmer. That was totally intuitive because I'd never seen a computer at that stage of my life. And a cheap computer was about \$5 million, so this is the early seventies. I went and did an aptitude test and as it turned out, I had a really high aptitude for it. I was able to get trained by a computer company and things went on from there. But when I look back on it now, I get plenty of adventure travel because I've been to some of the most remote parts of the world. And that desire to help people through the money I've produced, I've been able to do that as well.

**RF:** So you developed these software companies which became internationally successful, made you a whole stack of money and that gave you the wherewithal to, I suppose, go back to option one, social work, but just on a really big basis. Is that pretty much it?

**SK:** Yes, that's it. You could summarise it that way. It's interesting how we change in life. When I was young, I just loved programming, best thing I've ever done in my life, I'd be totally absorbed with it. And I was a really shy, retiring guy. Even if I attended courses on computers, I'd be nervous about asking a question



because I didn't want to ask a silly question. These days, I talk all the time. I am a very different person now than what I was in my mid-twenties.

**RF:** Once you made the decision, you and your wife to set up a charitable foundation, did you have a strong idea of what you wanted to do or were you just going to go in, see the lay of the land and figure out how to do it as you went?

**SK:** I'm very much an entrepreneur. I follow opportunity. Originally, we were doing odd projects here and there before setting up the charitable foundation. I was looking for things to do in Australia but I couldn't find anything which was really cost effective. Then I had a friend, and he was the treasurer of World Vision at the time, and he said, why don't you come over on a trip with me to the developing world. And that's when we shot off to Laos. When I looked at it, I thought, well, this sounds interesting. How often can you get inside a closed country? It was just so different. It was like going back 1,000 years in time. I can remember driving from the capital, down to a place called Savannakhet in the south. As you went along, there was not one house with a glass window in it. That's how far back it was, basically being taken back as one of those communist countries. The first project we did was in an area to put in clean water.

We put pumps in, just hand pumps to pull water out for people.

**RF:** What kind of results did you get just by creating sources of clean water?

**SK:** The death rate for children under five dropped from 18 per cent to 12 per cent, just through clean water. We did it for under \$20 a head. I was just hooked then. I realised that you can alleviate a lot of human suffering for very small amounts of money. I think one of the key aspects of philanthropy is it's easy to give but you really have to go and see the produce of what you do. That's where you get the emotional satisfaction/gratification from what you do. When you get to a project your heart would just open up and see the profound differences you're making.

**RF:** You went into Uganda, you went to a place called Gulu, which is one of the most dangerous places in the world. What was going on when you were there in Uganda at the time, Steve?

**SK:** We worked with the rehabilitation of child soldiers. What happens is these kids would get captured, the boys between seven and ten. Eighty per cent of the children they capture are boys, and the other 20 per cent are girls. Girls of 14 to 16.

**RF:** You're talking about the Lord's Resistance Army here, aren't you, an extremist Christian terrorist group that operates out of Central Africa?

**SK:** Yes, that's right. They're still operational. You got the Lord's Army there over in the DRC now in northeast Kivu. Probably more violent than Islamic State, the worst group I've come across in the world. They capture the kids by raiding villages. The kids who cry or are slow moving or complaining are killed on the way getting them back to base camp. They'd do that by getting the other boys, they'd captured to beat them to death. And usually within 12 months they try and get them to raid the same village they came from and get them to kill someone. Sometimes their own family. That way they'd cut off any escape route. The projects we did there were minimal. All you could do is take the kids, put them in this camp for maybe two months, do as much emotional healing on them as you can. You'd fix up the various diseases they'd have. Then you'd give them a bit of a stake to go back to some way to start their lives over again. But quite often, you couldn't send them back to the villages they came from because of those raids they did. Their people didn't want them back. They didn't trust them.

**RF:** How did seeing all that horror and the aftermath of all that horror affect your thinking, affect how you wanted to go about your philanthropic work?

**SK:** I think in many ways that etched very, very deeply into my subconscious, because quite often the poorest people in the world are living in conflict zones or near post-conflicts zones. That just stimulated me thinking about peace. What is peace?

**RF:** Now Steve, you were talking before about working in Central Africa trying to repair the damage created by one of the world's worst terrorist organisations, the Lord's Resistance Army. Which captures children, arms them, orders them to destroy their own villages, and sometimes to murder their parents as well. Now that is a level of violence that seems to me to leave the ground barren. Does it make it possible for peace to grow back in such places?

**SK:** Peace does seem to bounce back, but it bounces back slowly over time. And it comes back to a whole range of things. If you look at the end of the Second World War, most of the people alive then had been through two world wars, particularly the leaders. They were sick of war. People get to a point where they're absolutely sick of it. You've also got traumatised memory, which can get within populations. You can see conflicts from 100 years ago still haven't been forgotten in some communities around the world.

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We have about 50,000 different data sets, indexes and attitudinal surveys that we use to do the analysis. [...] The definition for positive peace is the attitude, institutions and structures which create and sustain peaceful societies.

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The building of peace is something which can happen by accident. It's something which is associated with improvements in living conditions. Living conditions are improving. We're not going to be thinking about violence as much as if we're struggling to exist, and we feel like we're competing more and more with other people for the meagre resources which are around us. But it's more than that. You need to get a government which is reasonable, so you can actually then take over rule of law in a reasonably consistent way so that people feel like there is some justice, even if it's rough justice, there is some justice there. If you've got group grievances, I'm talking about really big group grievances, if you just keep accentuating them, eventually the resilience is going to break and you're going to go back into conflict. This whole range of things, you need to really be able to look at till we create the environment for peace to build. But peace does build gradually.

**RF:** In some ways, the deadliest serious enemy of what you do is cynicism. There is a story in the book about a speech you gave in Uganda for a workshop that you were doing with Rotary. Tell me about that speech.

**SK:** That was in the early days of positive peace. We



were down in Uganda, and we got to about 150, 200 people there. We were teaching them about positive peace. These kinds of courses, you win or lose them in the first few hours. There was someone else speaking and they gave a highly technical talk, and they were losing the audience. You understand, this is Uganda, they had had Idi Amin and other despots like that through there.

This guy then said, yes, well, all this is well and good. But let's face it, war and conflict is just the natural state. And what you've really got to do is be part of the winning side. The audience got negative and thought – just a bunch of white people coming in, telling them what to do. Which is legitimate. So I just brought it back to the individual level, went up to the guy, stood about three feet from him, stared at him and said, well, look, do you want to live in an environment where your mother and your father could be killed? Do you want to see a couple of your children die in violence? I went down that line really strong, and he just went really sheepish and silent, and that then pulled the course back around. We went on and had some great success from it.

**RF:** You mentioned positive peace a lot. When I think most people think of peace, they think of it as an absence of violence. An absence of terror. If that's negative peace, if you like, or peace that's negatively defined, what for you then is positive peace?

**SK:** There are many different definitions of peace. What I realised in the end is that the definition of peace you use is relevant to what you want to achieve. Inner peace, for example, you could say that it's the absence of conflictive emotion. If you're a Buddhist and you're meditating or something like that, that's where you're going. It could also be valid if you're in a psychology setting and you're trying to get rid of violent and destructive emotions. But with Global Peace Index, it is the absence of violence or fear of violence. That's great as a definition of peace. Most people agree with it, and it's easy to measure. It's a negative measure of peace, if you like, because it's the absence that works. But that doesn't tell you anything about how to create a peaceful society. To do that, then we've done a whole lot of statistical analysis, mathematical modelling and such. We have about 50,000 different data sets, indexes and attitudinal surveys that we use to do the analysis. That's positive peace. The definition for positive peace is the attitude, institutions and structures which create and sustain peaceful societies. That's really quite profound because the same things which create peace also create a whole lot of other things we think are important. And that's why we say positive peace describes an optimum environment for human potential to flourish. And that's what we all want. In

the end, we just want to have flourishing lives.

**RF:** Your organisation's set up the Global Peace Index, and there's something quite comforting about that website, seeing all the countries' peacefulness indexed, ranked, described and broken down into data. What was the thought behind that, Steve?

**SK:** I was walking through northeast Kivu in the Congo at one point, and I started thinking, well, what are the most peaceful nations in the world? Anything I could learn from there to bring into the projects we're doing? And northeast Kivu is one of the more violent places. I got back to Sydney, searched the Internet, couldn't find anything. And I thought, wow, that's really needed to be able to rank the countries of the world by their peacefulness. It just dawned on me that a simple business guy like myself can be walking through Africa and think, what are the most peaceful countries in the world, and that question hasn't been answered. Then, in reality, how much do we know about peace? If you can't measure it, can you really understand it? If you can't measure it, how do you even know whether your actions are helping you or are hindering you in achieving your goals? You don't. Then I realised, when people talk about peace, it can be a political concept of the war stops, the guns fall silent. And that's peace. But it's not really peace. Or it's an anti-establishment view of peace, something which is very fluffy and can be related to spiritualism. And there's nothing wrong with that. All that's really good. But there was nothing really in the middle ground. That's why I established the Institute for Economics and Peace. And it's to take this concept of peace, bring it to the middle ground and realise that it's something tangible, something achievable and it's of a supreme benefit.

**RF:** It intrigues me the amount of prestige that seems to attach itself to the countries in the top ten. These countries aren't all located in the one place either. There are a few Scandinavian countries, there's Australia and New Zealand, but there's also Japan and Qatar. Has there been a sense of prestige that attaches itself to the countries that move into the top ten, a sense that this is the true index rather than GDP of the places where people live the good life?

**SK:** The Global Peace Index now is one of the leading indexes in the world. Let's say, something like the UN, for example, when they are doing their country analysis, it's one of the eight indexes which they use in their country assessment. It's used in a lot of different financial areas around the world. Financial indexes use the Global Peace Index as part of the ESG index, for example. A whole lot of different rating agencies are using it, and so it's used in so many different

ways. Like a lot of these major indexes, people want to move up. I won't mention the countries, but we have a number of countries which are engaging with us now actively trying to understand what they have to do to move up the index.

**RF:** At a governmental level, you mean?

**SK:** At the highest levels of government, yes. What they realise is that they get foreign direct investment. But how they rank on these indexes really affects global business decisions.

**RF:** When you look at a phenomenon, a global pandemic like COVID, and you look at countries that are doing better or worse on this peace index, what does that tell you about how COVID is affecting these countries?

**SK:** The countries which are strong on positive peace are the ones which have coped best through the pandemic. And the reason for that is they tend to be richer nations. They tend to have much better health systems. That's because the societies themselves are more productive, they're more efficient, better organised, so the health system is more robust. They tend to be wealthier, so it's easier for them to buy the vaccines and get them in. There are a whole lot of factors like that which come together.

You'll find the information flows are more varied, because free flow of information is part of positive peace. The media is more trusted, so therefore, it's easier to get the messages out and put it through the community. Look at the take-up of vaccines in Australia compared to some other countries, Brazil might not be a bad one to look at. You've got all these factors coming together, so they tend to have been able to cope economically and as best as possible with COVID. That's not to say a lot of the countries in, say, Northern Europe or North America haven't been massively affected, but they have coped better than a lot of African countries, for instance.

**RF:** You mentioned before, the pillars of positive peace, the systemic approach you'd like to bring when your organisation is asked to advise countries that are recovering from long periods where there's been an absence of peace. I'll just go through them again: a well-functioning government, a sound business environment, equitable distribution of resources, acceptance of the rights of others, good relations with neighbours, free flow of information, high levels of human capital and low levels of corruption. Now, your organisation was brought in to advise the Government of Zimbabwe, which is trying to recover after decades of Robert Mugabe and the legacy of colonialism before then. When you come into a place

like Zimbabwe and you're asked for advice and to bring this whole systemic approach through these pillars, how do you do that? How do you begin that conversation?

**SK:** What we do is we start with data. We've got the positive peace that breaks down into 24 measures. We take those measures and we break them down into about another 400 measures. What you do then, you see which measures have been improving over time, which measures have been deteriorating over time, and then the momentum and the pace of those deteriorations. And then you compare, let's say, to a basket of countries which are very similar, generally your neighbouring countries. So, you'd be comparing to places like Zambia, Botswana and such. That gives you a relative idea of what's working, what's not working and what really needs to be improved. And that then starts a conversation.

**RF:** How important is it to have a partner on the ground with all of this, Steve, or several partners who can convene that table that wants to hear what you have to say?

**SK:** I think partnerships in these kinds of areas are massively important. The reality is we're a small research institute with 40 people globally, so we're hardly going to be able to go into a country and implement on-the-ground programmes. But what we can do is basic research, which other organisations can then leverage and extend off. Partnerships are always incredibly important.

**RF:** When you look at nation-building exercises, I can't think of a worse example than the Iraq War, and I think you mentioned that a few times in your book. How does that work for you as a kind of do not do this, don't go there as far as your research goes?

**SK:** Look, I think it's crazy. The most conservative estimate of the cost of the Iraq War was \$2.3 trillion.

**RF:** God, you could fix the globe's climate emergency twice over with that money, couldn't you, Steve?

**SK:** Exactly. The real cost is probably about seven trillion. Now, I think the lesson from it is, it doesn't matter how much money we've got, we're not going to be able to fix a lot of these really intractable issues unless we actually get the implementation right. We have to come back and realise that a lot of these problems are systemic. And we've really got to be able to understand the nature of the problem before we can start to do interventions. There's a common thing in developmental aid: what people can see is lots of successful developmental projects, they're

everywhere. There are great projects, like some of the ones I've mentioned, which we've done through the charitable foundation, but they don't seem to change the system. That's because one's addressing a particular problem, like in Laos it might be the clean water, but you're not actually addressing the whole problem systemically. And I think this is the big change we need. A lot of people are starting to talk about it, but it's a long way from the talk to really understanding the way systems operate, and then how do you define institutions which are systemic. If we look at the Sahel, that's probably one of the most problem places in the world at the moment. You've got these huge systemic problems. You've got overpopulation. You've got lack of food, lack of water to generate the food. You've got really weak governments which can't actually implement any security. You've got Islamic militias committing terrorism running around. You've got huge numbers of refugees. If we look at the UN, and I'm a big fan of the UN, I think they do a lot of great work. You've got UNHCR looking after the refugee issue, UN peacekeepers trying to keep the peace. You'll have the UN Population Fund trying to work on the population issues. You'll have UNDP coming and doing WASH projects, then other standard development projects, so more silos. You might have the World Bank coming in and now working with the governments to try and create better governance and better ways of operating. I could keep going with more and more and more different organisations. The real question is, how do they come together to work systemically? Because of the duplicating effort, they're not aware of the issues which the other ones are trying to work, and therefore, you can't get a systemic solution.

**RF:** You mentioned the Sahel region in Africa and, crudely put, to the north of that line in the Sahel is primarily Muslim, and to the south of it is primarily Christian. You've got terrorist organisations like Boko Haram which are Islamists, and the Lord's Resistance Army who are nominally Christian. What does your research tell you about the role that religion plays when it comes to the absence or the presence of peace?

**SK:** It's very, very complicated. If we went back over the last 20 years, the relationship between terrorism and Islamic jihadists is very, very strong. But terrorism now has been decreasing each year for about the last eight years. Terrorism, in some ways, is on the decline. Now if we come back and start to look at conflict, what we find is that there are highly peaceful nations which are very religious, and there are highly peaceful nations which aren't religious. There are highly unpeaceful nations which are quite religious and highly unpeaceful nations which aren't very religious

at all. When we start to dig down and look deeper into it, we find that there are a lot of other things which provide better explanations for the violence than religion. This we arrive at mainly through using statistics, but other mathematical modelling as well. The real thing is like religions can create a fault line within a society, particularly if you've got one area which has got all the power and money, and the other work group's marginalised. That's a fault line. It'll come back to a group grievance and come back to inequitable distribution of resources. Generally, the fault lines lie elsewhere, because there are plenty of examples of different countries in the world with the different religious groups which manage and get on reasonably well.

**RF:** You think most world leaders have views that are trapped in an earlier age. What do you mean by that?

**SK:** I think this gets philosophically rather deep. It's a concept of cause and effect versus systems. Most leaders are thinking that, well, what's a problem? Okay, there's a problem. What's the cause of it? Let's go back, fix the cause and then the problem goes away. But societies act very, very differently than that. The cause and effect is great, that comes out of the study of the physical world. In physics and in science, what you find is an effect won't go back and influence the cause. It's like throwing a ball in the air and catching it. Modern science is built around that. Societies operate very, very differently. Does the government affect the free flow of information or does the press affect the way the government operates? Does corruption affect the way the government operates or does what the government does affect the way corruption operates? And does corruption influence the free flow of information or does the free flow of information or the press affect the perceptions of corruption? You can't separate it. That's what I'm talking about being stuck in a past age. Because the problems we're getting globally now – particularly as we become more globally interconnected – and the problems we're getting now are around the sustainability and limitations of growth. We need to be able to think of new ways of being able to envision human society, different ways of being able to develop. The positive peace, combined with the system's thinking, does give a paradigm shift in the way we can go about managing and running our world so we can get something which actually meets the way societies operate, and with the real issues which are going to affect us in the twenty-first century.

**RF:** Do you think the concept of peace has a spiritual dimension to it?

**SK:** The work we do out of the Institute for Economics



and Peace, we're really focused on the macro factors. But let's face it, within us, we all want to be a little bit more peaceful, don't we? We all want to have somewhat less afflictive emotions. This drive for inner peace, if you like, is just as real as our drive for external peace. In many ways, I think, all of us are just looking for that. Quite often I get asked the question, what can I do to create a more peaceful world? And what can I do to be more peaceful? And a lot of the time, our peace just comes out of our interactions with our fellow human beings around us. It's like, going and getting a coffee and smiling at the person giving you coffee rather than complaining about the coffee beans because they're too cheap. The person behind the counter can't do anything about it. They don't own the coffee shop, do they? When we're dealing with our family and our friends, we get upset about something, just take a bit of time, think about it before we respond. Then sure, it's fine to respond if it's still real in our minds, but we'll have a much better way of doing it. It's the wording of an email. For me this happens daily. You put an email down and you think, well, can I phrase that better? And it's not about changing anything you're doing, it's just about being a little bit more thoughtful of where the other person is coming from.

**RF:** I'm asking you these questions to get at a personal view from you. You're not giving these views and ideas from some lofty mountain top. You've been into some of the worst places in the world where people perpetrated the most unthinkable things. That must be very, very hard to even think to talk or write about. Have you arrived at some kind of settled view of human nature as a result of all this? Do you think humans are still fundamentally good for all of that or are we pretty much just these terrible locusts that are engaged in sucking up every nutrient from the earth and are going to leave it barren? Do you have a view on all of that?

**SK:** Yes, I do. I have a lot of views on it, actually. I think we're stuck in a reality which has got some of the worst things you can imagine and some of the best things you can imagine. Sometimes you can go into these places and meet people who've come from the worst position. The worst of it. Seen the worst of it. And end up absolutely peaceful and transformed through it to become truly great human beings. Then on the other hand, you can go to some of the richest people in the world and find that they're miserable and really quite vicious. We're living in a third-generation solar system, so we're all just made up of stardust from prior explosions of suns. What's more violent than our sun exploding and taking everything away with us? If we get down onto this planet, we have to live through eating other living creatures. What's

more violent than that? Yet, we've got this concept of peace. And that's a profoundly philosophical question to ask. Why? If you're looking at behavioural psychologists, they'd say it was the way the groups were able to get on. If you went and took more of a spiritual stance on it, it's a battle in some ways for good and evil, yin and yang – whatever you want. But it's the battle of us fighting with some of the negative parts of our emotions versus the positive parts of our emotions. How do we become better people? I think if we become better people, we do become happier and more fulfilled.

**RF:** Great to speak with you, Stephen. Thank you so much.

**SK:** Okay, great. Good being here.



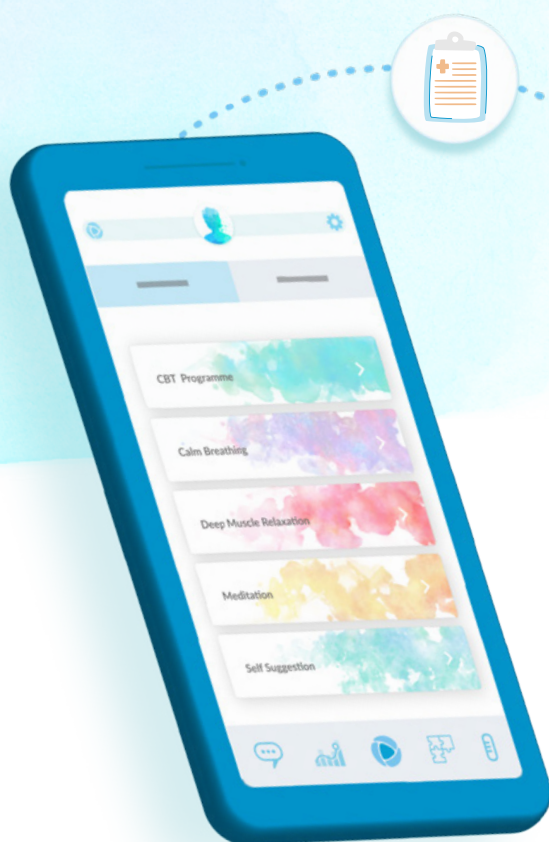
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# The power of immediate feedback



**LUCA DELLANNA**  
ECON TALK

*Interview by Russ Roberts*

**Russ Roberts:** My guest is author and consultant Luca Dellanna. Our topic for today is his fascinating book, *The Control Heuristic: The Nature of Human Behavior*.

I want to start with the conception of the brain that you put forward – the idea of the distributed brain, and how you liken the brain to a corporation or a company making a decision. I found this to be a very powerful way to think about impulsive behaviour and how to change that behaviour. Explain what you have in mind about the distributed brain.

**Luca Dellanna:** I think that our brain doesn't work as one, and I'm not talking about left hemisphere or right hemisphere. I'm talking about the fact that the cortex and other parts of our brain are made of different regions. And while each region communicates with other regions, it doesn't have a full overview. So, I liken it to employees in a company. Each employee in a company has access to limited information and takes decisions based on what he thinks is best for the company, but only according to limited information. That sometimes usually produces good results, but sometimes it produces counterintuitive results. And usually when it produces counterintuitive results, it's because the employee didn't have the full overview.

The second concept that I talk about is that while regions see the output of other regions, they cannot know why the region produces that output. So, for example, if I feel scared, the analytical part of my brain can see that the output of the emotional part of

my brain is being scared, but it doesn't know why my brain said that we are scared. And then it confabulates – it comes up with the most plausible explanation, which might or might not be the right one.

**RR:** In the book you give a lot of examples of how you can take small steps and you talk about the importance of the immediacy of the reward. Talk about how that might work in practice.

**LD:** Rory Sutherland has a great example about this. He asks: Why do most blends of toothpaste have mint flavour? The reason is that mint flavour has nothing to do with keeping your mouth clean, but it has everything to do with promoting the habit. Imagine that toothpaste doesn't have mint flavour. What happens is that you brush your teeth once, you don't feel anything; and you think that you wasted your efforts, and then you stop brushing your teeth. Conversely, with the mint flavour, you brush your teeth and you have the feeling of a clean mouth. That makes you think that your efforts are bringing results and you keep brushing your teeth. Meanwhile, something else produces the desired effect of preventing cavities.

The same applies to our actions. We need to ask ourselves: is there the mint flavour? Are there immediate results telling my brain that I haven't wasted my efforts? This applies both to our habits – we should think about ways to make sure that we see benefits immediately – and it also applies, for example, to how managers communicate change within a company, when they expect their employees to do something differently. They need to give early and immediate feedback so employees don't think they are wasting their efforts.

In my high school I had lots of brilliant classmates who were terrible at studying, were disengaged. But they were excellent at video games. And, I'm not just talking about playing video games – playing competitively, making elaborate strategies, practicing, trying new strategies, and so on. I always ask myself, 'Why is it that people engage so much with video games?' I think that the answer is that video games



give you some empowerment and control. They give you immediate feedback, and they give you visible progression. And, this is absent for most of our working life. An employee doesn't really have much control. When he does things right, he doesn't know it until the end of the week or sometimes even until the end of the review. If he progresses, he doesn't get the feeling of progression until he receives a raise one year later. Therefore, it's normal – it's rational – to adapt by disengaging. I think that there are incredible margins of opportunity into just giving faster feedback, more immediate feedback.

**RR:** A lot of people ask me how to get smarter, how to learn more, what they should do with their lives, which is very flattering, but challenging.

One of the things I always tell people in this situation, especially young people, is: read. Reading is really important. Reading is undervalued in today's culture. We're screen-oriented. In general, what we consume on our screens is short-term candy and not so much long-term medicine. Reading is a phenomenal medicine. It makes you smarter. It adds things for your brain to work on later when other books come in and other information. It's phenomenal.

A lot of people, I think, read less than they'd like. I once went to a time management seminar and the teacher asked, 'How many people wish they read more?' Every hand in the room went up. Every hand. He said, 'Why don't you?' And, his answer, which is not unrelated to yours, is: books don't ring. Meaning, your phone rings, and saying, 'Hey, I'm over here.' They just sit there and you don't think about them. But the other part that you're emphasising is that the returns from reading are abstract, way in the future. I think what you're saying is that habits that have a long-term payoff, but not so much of a short-term payoff are very difficult to implement.

**LD:** Related to this, I have a concept of meta-practice. The idea is that when we are learning a new skill, we usually practice the skill. For example, I want to learn to shoot better basketball. I practice shooting the basketball. But, often we do not practice the practice. The idea is that maybe I can spend two hours shooting a basketball, and maybe I'm not learning anything out of it because I'm not getting any feedback. So I always advise people when you practice, don't only practice your skill, but also practice your practice. Ask yourself, have I learned enough? How can I learn more? How can I change my practice so that I learn more tomorrow? Have I enjoyed the practice enough so that I want to practice again tomorrow? And, if not, how can I change the practice so that I will be more likely to want to practice the next time?

**RR:** Let's talk about procrastination. I think most

people think procrastination is a character flaw, but you see it a little bit differently. Explain how you look at procrastination.

**LD:** I really don't think that procrastination is a character flaw. One of the ways I explain it in the book is the concept of passive sabotage. If you are requested by someone to take an action and you don't think that action is good for you, you will either not do it, or in the case you are required to do it, you will do it badly. And I think that's exactly what happens in our brain for a lot of things. The analytical part of our brain coerces the emotional part of our brain into taking an action or makes a contract with someone else or yourself, a promise. But then the emotional part of our brain is, like, 'I don't want to do it.' Not because I'm lazy, but because I think that the outcome will be bad for me. And so, of course I try not to do it. And, if I have to do it, I do it as little, as fast, as poor quality, as possible.

**RR:** At one point you wrote, you write in your book, 'A sane mind is designed to hold beliefs that are inconsistent with each other.' Explain.

**LD:** Back to the metaphor of the brain as a company: you have different employees. And, it's possible that the different employees hold different beliefs, incompatible even, but for each employee, they have extremely good reasons and they can justify that very well. And, usually also objectively. It's completely possible, for example, that for the visual part of my brain, it says, 'Oh, this cheese looks really good and I should eat it.' And, it's possible that for the olfactory part of my brain, it says, 'Oh, the cheese smells awful and I should not eat it.' And, they are incompatible; but they're very well justified. The reason why they live together is because no part of the brain has access to all the information. If they had the same information, they couldn't have incompatible beliefs. Because they have access to different information, it's rational for them to have incompatible beliefs. And, it's also optimal.

We see in a lot of species – I'm thinking for example in bees – that the optimal strategy for the hive to choose the best new hive location is for bees to hold incompatible beliefs. The way it works is that each bee goes exploring random locations around the nest and then comes back and then makes a dance, which expresses, 'Oh, I went to this place and I think we should build the nest here.' Or, 'I think we should not build the nest here.' And then, the bees do their dance. They look at the other bees dance. If the other bees dance better, like, more vigorously, which means they have a stronger belief, they start accepting the belief of the other bees, or they start visiting the suggestion and then come back with their own opinion. Then

eventually the hive convergences in a single opinion and moves there. That's the optimal strategy for bees, which has been proven by millions of years of evolution.

The same applies for a population. I strongly think that for a population, the optimal strategy is to have different people with different opinions and then have some system to converge over a single cause of action. And the same applies to our brain. For our brain, the best cause of action is to have different regions with different opinions and then have something that produces a single cause of action. And, in that case,

is the gatekeeper.

Now the last, the tricky point is that because our brain produces one single cause of action, we usually think that our brain thinks as one. But, that is wrong.

Just like elections in the country, they produce one single action. For example, that the president, they chose this president. It doesn't mean that everyone thought the same. And, the same applies to our brain: it is not because I decide to eat the croissant, that all parts of my brain agreed that eating the croissant was a good choice. ■

## Examining interstellar objects



**AVI LOEB**  
JOLLY SWAGMAN PODCAST

*Interview by Joe Walker*

**Joe Walker:** You are known publicly for your relation to an object known as 'Oumuamua, which was the first detected interstellar object to reach our solar system. It had some unusual properties which suggested that its providence might be consistent with an artificial origin. Before we started recording, we were talking about Arthur C. Clarke's book, *Rendezvous with Rama*, where an interstellar object enters our solar system in the year 2100, and humans realise that the orbit of this object means that it's probably not a comet or anything of natural origin. And they go to investigate and find that it's an object from an alien civilisation. What about 'Oumuamua suggests that it may have an artificial origin? Say as much as you feel comfortable saying. Secondly, should we have a rendezvous with 'Oumuamua?

**Avi Loeb:** I should say that I approach this subject in the same way that I approach the search for dark matter. Most of my career, I have worked on the universe, cosmology and on black holes. Only recently have I become interested in much more nearby objects, like 'Oumuamua for example, and in the search for life. But I approach these subjects in the same way as I approach anything else.

Just to give you an example. A couple of years ago,

some astronomers reported that hydrogen in the early universe was much colder than we expected. The only constituent in the universe that is colder than hydrogen is the dark matter. So, we wrote a paper where we suggested that maybe the dark matter has a little bit of charge so that it couples to the hydrogen and cools it. That was a speculation and there wasn't much of a reaction to it, but the paper was published in the most prestigious journal in physics.

When 'Oumuamua was discovered, and it started to show some unusual anomalies – it didn't have a cometary tail, it had a very extreme geometry and it deviated from an orbit shaped just by the sun's gravity. Because of these anomalies, we just suggested in a paper that it might be a solar sail. Some kind of a sail that is pushed by the sunlight because there is an extra force acting on it. That was a short paper that was accepted for publication in the *Astrophysical Journal Letters*. The amazing thing is that immediately after that, there was a huge response to that paper, unlike the paper on dark matter. I was surprised, really surprised, by the level of reaction. For example, I was interviewed on CNN and Smerconish, the interviewer, basically took excerpts from the scientific paper in the *Astrophysical Journal Letters* and asked me specifically about these quotes, and asked me to address them and explain them. I don't think there was ever a paper published in the *Astrophysical Journal* that was quoted on a news broadcast like CNN, as if it was a statement that requires a lot of attention. Obviously, the public is very interested in the possibility that life may exist out there. And I think it should be part of the mainstream, and so I try to explain the scientific process – that there are all these

anomalies, we don't know what it is, and we need more evidence. It's just like anything else in science, it's not as if we are saying it's one way or another, we're just saying it's a possibility that should be put on the table. That's all. And I don't see anything wrong about it, just like the possibility that dark matter is charged. It was put on the table and, with more evidence, we could test it.

So, we could test this hypothesis by collecting more data on 'Oumuamua, or by waiting for the next object that would look unusual. The second interstellar object that was discovered was Borisov and it was a typical cometary object. So, we saw a cometary tail.

**JW:** This is the main reason I wanted to have you on the show and why I have so much respect for you – while many scientists are preoccupied with advancing their careers, not exposing themselves to ridicule, you were prepared to expose yourself to ridicule by following the argument where it leads according to first principles and suggesting this extraterrestrial hypothesis for 'Oumuamua. I was very impressed by that. I wanted to explore with you though, what do you think accounts for this resistance by the community of cosmologists? Why is claiming that 'Oumuamua could be of extraterrestrial origin somehow counter narrative?

**AL:** There is this tendency of scientists to shy away from controversial subjects or subjects that are of great interest to the public. Sort of like isolating themselves in the ivory tower, and maintaining a professional level that is difficult for the public to understand because of the technical details.

The problem with the subject of the search for extraterrestrial intelligence is that there are lots of science fiction literature, and films, and also reports about the unidentified flying objects, that are not up to the scientific scrutiny of evidence. So many scientists prefer not to be controversial, not to make statements that are of great interest to the public. I see that it's actually inappropriate given that the science is being funded by the public. If the public is interested in the subject, we should not shy away from it. We should use the scientific methodology to address it in the same way that we address the dark matter problem. And we should just be straightforward about things we know, and things we don't know, admit what we don't know, and lay out the evidence the way it is, and not just hide it behind the walls of an ivory tower and say, 'Let us first figure out for ourselves what it is before we speak to the public.'

I think that scientific inquiry should be transparent to the public. I enjoy speaking with people that are not professionals. They often come up with excellent ideas, excellent insights, and are very often authentic and straightforward. That's the way science should

be done. Only when the public sees that we are not confident of a conclusion, when the evidence is not robust, only then will the public really believe us when we are confident that the evidence is robust. We cannot just figure it out for ourselves and come out with statements to the public as if the public was a bunch of students in a classroom, just telling the students what the truth is, and without getting into the details. Because it's really important that the public can understand that when the evidence is not conclusive, then we don't have a consensus in the scientific community. We have some ideas, some conjectures, but we need more data. We need more evidence to figure out the truth.

**JW:** So where is 'Oumuamua right now?

**AL:** Well, it's too far for us to see. It's like having a guest that came for dinner, and by the time you realise that the guest is very strange, it already left through the front door and you can't really speak with that guest anymore. The problem is not so much that it's in the dark street, that we can't see it. It also went in a direction where it's such a small object where we can't really know exactly where it will be in the future. So it's almost impossible to find it. You need to send a spacecraft that is equipped with a telescope, a very powerful telescope, that will be able to track it. And there is no spacecraft, no rocket, that would be able to move faster than it does right now. So it's sort of a lost cause. We have to wait for the next one. It would have been much better if we had collected more data about this one, but nobody suspected. People thought, 'Oh, it must be a piece of rock.' So there is a lesson to be learned to study future objects more carefully. I would be the first to accept evidence that shows it is a rock, and that's the way science is done, by evidence. Not by prejudice

**JW:** You mentioned UFOs beforehand. Did you see the 2017 *New York Times* report on the United States Navy's encounters with the Tic Tac UFO in 2004 and the so-called Gimbal UFO in 2015?

**AL:** I would say the following about UFOs – that our technology in terms of recording evidence through imaging devices has improved dramatically over the past several decades. The cameras that we had several decades ago were much lower quality than the cameras we have today, much less sensitive. The UFO reports were always on the borderline of being believable. They were always marginal, and that's not what you expect. You expect that if these things are real, then as you improve your equipment, you will be able to see them more clearly. So, to me, that indicates one of two possibilities. Either these UFOs are just artifacts. They are things that happened by





Photograph: Jeremy Thomas

chance, that you think are unusual, but actually just are mirages, things that are not real. That you see the reflection of light from some cloud and you think that it's something unusual. The other possibility is that they are related to equipment, military equipment, things that we don't know about that we see, and obviously that will always track the latest technology. So it will always be difficult for us to identify the nature of. These are the two natural interpretations that I can think of, but so far I haven't seen something that stands up to the level of scientific scrutiny that conclusively indicates an origin that cannot be explained.

**JW:** My sense is that one of your motivations for wanting to find evidence of alien intelligences is that, as we discussed earlier, they might give us these shortcuts or allow us to cheat on the exam of answering some of the most important questions in physics. But do you also worry that we might be inviting our own destruction if we come across hostile civilisations?

**AL:** I do think that it would be prudent on our side to listen and not transmit signals. We haven't been careful because since radio technology was developed here on earth, about a 100 years ago, we have been transmitting quite a bit. And these signals have gone out to about a 100 light years by now. They indicate that we exist. We weren't careful about it. The present-day technologies are not transmitting as much as the old technologies. We are not using very powerful radar, as we did in order to detect ballistic missiles after the Second World War. We are not using radio for communication as much as we did, because nowadays you have fiber optics and other means of transferring information. I think, overall, we should reduce our radio footprint, and anything we transmit, and try to detect first if there is anything out there. That would be the smartest thing to do. And perhaps what the advanced civilisations are all doing. ■

# The future of human geography

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Photograph: Ravi Sharma



## PARAG KHANNA CHARTER CITIES PODCAST

*Interview by Mark Lutter*

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**Mark Lutter:** My guest today is Parag Khanna, he is the founder and managing director of FutureMap, a data and scenario-based strategic advisory firm. He is an international bestselling author of six books. His most recent book is entitled, *Move*.

What is the thesis of your new book, *Move*?

**Parag Khanna:** *Move* is basically about the future of human geography, which is the distribution of the 8 billion members of the human species around the planet looking forward the next 10, 20, 30 years. Looking back from 2050, how did we get to where we are in 2050 and why and where are we? What does it tell us about the mega trends shaping the future?

Another way to look at it is really the war for talent, particular the war for young talent. The desire for places to attract young people in a demographically deflating world and amidst the backdrop of climate change. The two sort of reliable mega trends right now are demographic deflation, meaning the plateau of the human population which has been accelerated by the two baby busts of the financial crisis and COVID. And, of course, climate change and the acceleration of climate change which renders some places more liveable and other places less liveable.

With those backdrop conditions, and others as well, everything from economic crisis to labour automation, to civil wars and unrest and refugee flows, I account for all of that and then I project forwards several



scenarios for what or where we will wind up.

**ML:** What does the world look like in 30 years?

**PK:** Well, the world is certainly divided into liveable and unliveable zones, how they relate to each other is the area in which I draw four scenarios in the book. The first is called Regional Fortresses so in the Regional Fortresses scenario, the relatively climatically robust or resilient regions, like parts of North America, Europe, Russia, Japan, they are anti-migrant but they are pro sustainability for themselves. Regional Fortresses is a scenario that most represents the status quo.

There's another couple of scenarios that rank very low or in terms of our overall sustainability and the control over migrant flows. One is called Barbarians at the Gate which kind of says what it is and the other is the New Middle Ages in which I talk about the fragmentation of polities and the competition for scarce resources and the very uneven nature of investments in sustainability, whether it's energy, food or water.

The fourth scenario is called Northern Lights. That's the aspirational one and sort of the normative appeal that I make towards the end is, what would it take to get to a world in which we can have more fluidity and mobility for our population as well as more sustainable habitats from an infrastructural point of view? The combination of the legal and the implications this has for sovereignty, and the technological, meaning, what other kinds of mechanisms and instruments that would make this possible.

**ML:** How would you weight the likelihood of each different scenario? Or what would cause you to think that one scenario is more likely to happen than another scenario?

**PK:** I have crafted these four scenarios in such a way that you could plausibly say that elements of all four of them are occurring and unfolding right now and will probably continue to, and all four of them will be true to a greater or lesser degree somewhere in the world, most likely at the same time.

We can certainly assign a high probability to the idea that climate diplomacy will get more serious around mitigation measures, everything from carbon taxes to geoengineering and then adaptation will happen at a more localised, rather than global scale. Again, that's where we are right now. Fairly high probability.

However, when you bring in the fact of the demographic deflation and the need for young populations to replenish and rejuvenate northern hemispheric societies, you might gravitate towards one of the other scenarios in which there's increased

migration rather than strong protectionism and barriers and you can imagine, again, very plausibly that today's prevailing populism and xenophobia actually does wind up giving way to this war for talent for very obvious demographic and labour market reasons.

You can see very strong evidence that that's actually happening. Trump and his immigration policy were an aberration from the norm, Brexit was an aberration from the norm. If you look at the UK today, it's easier to migrate to the UK right now in 2021 than it was in 2015. You used to have to pay a security bond and offer a letter or proof of work. Today, you just have to show that you're a graduate from some institution and they'll let you in. Such has been the nature of their labour shortages in the NHS and the like.

Canada is another good example which is, by design, increasing its population at a rate of about 1 per cent per year which amounts to roughly 400,000 people. I think we'll look back in 20, 30 years and say, 'Trump who?' when it comes to immigration policy, and, 'Brexit what?' when it comes to the population of the UK, because on a relative basis, North America is a climate oasis compared to other continents and, most certainly, Europe is.

Let me give you an example. It's South and East Asians migrating into western Europe. The term that I coined for this is Asian Europeans. This is, for me, an interesting reflection because I grew up as an Asian American, immigrated to America as a kid. I spent part of my high school years in Germany though, and I was definitely the only Asian kid and one of the only American kids, within a couple of hundred kilometres.

Nowadays I go back to Germany all the time and it's flooded with Asians, it's flooded with Vietnamese, Chinese, Indians, Pakistanis and so forth. There is significant number of permanent east-to-west across Eurasia migrants.

It's backed by any number of very robust drivers. The growing trade between Europe and Asia, the largest trade on the planet is not transatlantic, the way it was when we were kids, it's trans-Eurasian. There's the new silk roads and infrastructure connectivity, some Belt & Road and so forth, the Chinese plan.

When you talk to European politicians, they are quite in favour of having more east Asians and south Asians who are skilled in IT, nursing, medicine, whatever the case may be, some of the areas where they have the most significant labour shortages. You can see this is one of the anecdotes I have in the book is from going to SAP headquarters outside of Frankfurt. SAP is Europe's largest software company, its campus resembles Cisco Systems and not just because of what they do but because of who is there. It's packed with Indians.

I never would have thought that nearly 30 years after being a high school student in Germany that

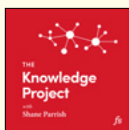


I'd be in a place in Germany that was surrounded by Indians. If you count it up, you've got about 4 to 5 million Asian Europeans already now, versus 25 million Asian Americans. But based on the trends, based on where people feel that they can have a more stable upbringing for their families and places that might be welcoming towards them, a lot more Asians are going to say, 'You know what? Europe is pretty close by, education is subsidised and it feels rather safe.' I predict that whether it's in 10 years, 20 years, I think we'll have an equivalent number of Asian Europeans as there are Asian Americans.

**ML:** What are the most successful examples of migration in the past?

**PK:** A lot of people hear the phrase 'mass migration' and they think of significant instability, but you've got to remember that much of the nineteenth and twentieth centuries was an age of mass migration. The majority of international migration in the twentieth century wasn't Second World War political refugees, it was economic migrants, and those economic migrants were peacefully absorbed into their destination society, such as the United States. We need to be clear that mass migration is not something that we historically have a great deal of difficulty with. It's something that we as a species and a set of societies have done amazingly well at absorbing. ■

## Stoicism: a philosophy for the world



**RYAN HOLIDAY**  
THE KNOWLEDGE PROJECT

*Interview by Shane Parrish*

**Shane Parrish:** Ryan Holiday is a prolific author and modern philosopher. His books include *The Obstacle is the Way*, *The Daily Stoic* and, most recently, *Courage is Calling*. Ryan, what is stoicism?

**Ryan Holiday:** It's a philosophy that originates in ancient Athens. It makes its way to Rome over the next several centuries and becomes the most interesting and practical of the ancient philosophies. Perhaps when people hear ancient philosophy, they think, 'That's really interesting intellectually, but of very little use to me.' What I love about stoicism, what gets me excited about it, is that all of the stoics were active elite professionals at whatever they did, and stoicism was a guiding force, a thing that allowed them to do that, and guided the decisions they made inside that field.

They weren't Diogenes the cynic or a Buddhist monk or anyone whose pursuit of a philosophy or a set of ideas, took them away from the world. What I love about stoicism is that it's very much philosophy

for the world. It is literally founded by a merchant who loses everything in a shipwreck. It's founded in the Athenian Agora, in the centre of Athens, in the marketplace where it is battling from day one, limited attention from busy people who have actual lives.

**SP:** What are the key teachings of stoicism that everybody should know?

**RH:** Epictetus, who was a slave but becomes a philosopher, says the first task of stoicism is an exercise called the dichotomy of control. It's the distinction between what is up to us and what is not up to us. Any energy spent on stuff not up to us is wasted.

The next thing the stoics build upon the idea of dichotomy of control is that we don't control what happens, but we control how we respond. Then Marcus Aurelius building on that says, 'Everything that happens is an opportunity to practice virtue.' My first book, *The Obstacle is the Way* is about this specific stoic teaching that stuff happens that is out of our control, or we make a mistake with something that's in our control, and then what we do with that is an opportunity to practice excellence in some form or another. I feel like the stoic is embracing both their powerfulness and their powerlessness at the same time, and fusing it together into this real understanding of where we have agency, where we don't and what are we going to with that agency?

**SP:** Speaking of stoicism, Seneca said 'I shall never be ashamed of citing a bad author if the line is good.' So, you can learn something from everybody. It doesn't make them a good or bad person. But it seems like society today just wants to chuck out people if they have a blemish. What do you think of that?

**RH:** I think that's totally right. There are lots of good lessons that come from bad people, and they're not always cautionary tales. A lot of people are tragically gifted and flawed at the same time. I think this is a thing that people struggle with. History is uncomfortable, and it is inherently built around, not just flawed human beings, but usually characters which are, by definition, more ambitious, more everything. Or otherwise they would've been an unremarkable, forgettable part of history.

So, Churchill – who I'm fascinated with – Churchill's virtues are incredible, but they correspond with equally enlarged vices, and that's what made him Churchill. I am very much of the school that we can learn from anyone. The proof of what Seneca is talking about, is that in Seneca's letters, his book, *Letters of a Stoic*, one of the incredible works of ancient literature, the philosopher he quotes most as a stoic is Epicurus. And Epicurus is someone he vehemently disagrees with on almost all issues. In some cases, he's quoting where he agrees with Epicurus and in other cases he's saying where he disagrees with Epicurus. But the lesson is that he is intimately familiar with the works of all the schools, including the ones he disagrees with.

**SP:** This goes back to that concept of if you're going to have an opinion, you have to be able to argue the other side of it better than the other person can argue it. You have to be able to walk around the problem in this three dimensional way, which means you have to understand other people's perspective.

**RH:** Yes. The first person I heard this from was Peter Thiel. Instead of reducing your opponent's argument to a straw man, the least charitable interpretation of what they think and why, actually put yourself in their shoes, try to argue it as well as possible. Usually, not only will you find that there's some validity to what they're saying, but it will make your argument stronger because you will have pre-emptively addressed the strongest parts of their argument. I think people are often afraid to do that. They understand intuitively there is some validity to what other people are saying, and their fear of it makes them unwilling to wrestle with that, so they reduce it to a preposterous caricature.

**SP:** Let's go back to people having equal strengths and vices. We have discussed this in the past, and



Photograph: Faruk Tokluoglu

couldn't think of any examples of anybody who was both extraordinary and well balanced. Anybody who has achieved extreme success was not somebody you would suggest lived a balanced, healthy lifestyle.

**RH:** Yes. It's like what American president would you actually want to be? I think this is true for billionaires. This is true for professional athletes. I think it is often some sort of wound that drives a person into the public sphere to begin with. If Elon Musk was balanced, he probably would've been happy and satisfied with PayPal. He made tens of millions of dollars. He changed not just the technological landscape, but he changed how money changes hands between people. But he was not remotely satisfied with that.

If Michael Jordan was easily satisfied, his high school career would've been enough. And then his college career would've been enough. And then the first championship would've been enough. So inherently, insatiability is a key differentiator in a lot of high performers. I think Stephen Swid said, 'Never before has a conqueror been surfeited by conquest.' Meaning no conqueror was ever like, 'I won and now I'm good.' There never is enough. That's what made them who they were. So, I think that's part of it. But as I've worked on this in my own life and had a bit more experience, I find there is a survivorship bias that we don't think about.

You think about Michael Jordan, you think about Kanye West, you think about Elon Musk, you



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... the first task of stoicism is an exercise called the dichotomy of control. It's the distinction between what is up to us and what is not up to us. Any energy spent on stuff not up to us is wasted.

”

think about Winston Churchill. Not only were they really talented and driven and ambitious, they also had some insatiable desire for public adulation or attention. But there are a lot of people who won two championships with Michael Jordan that we don't think about. I think we often forget that the people we've heard of more often than not, not only wanted us to hear of them, they needed us to hear of them. And the slightly more balanced people, I don't know, Tom Hanks, one of the greatest actors of all time, he doesn't seem as tortured as Daniel Day-Lewis.

**SP:** Going on to the next topic. How can we learn to manage our anger?

**RH:** Just because you don't have an anger problem, doesn't mean that anger is not a problem for you. When I look at most of the mistakes I have made, most of the things that I regret, most of the things that I wish I could undo, usually anger is a pretty big part of that. It was why I chose not to do X, Y, or Z. It's why I was speaking this way or that way. I think the question about anger is: does it make you better at what you do? It may in the short term, but is it fuel that can get you where you want to go over the long term or is it really corrosive? And usually I tend to find that it's pretty corrosive.

So start with: let me make sure I'm not lying to myself about my temper. Because a lot of us tell ourselves, 'It's because I really care or it's what drives me. I'm not as bad as my boss or my dad

or whatever.' But if you really step back and ask, 'What is this adding and what are the costs that it's coming at?' It usually becomes pretty clear that it's not a positive force in our lives.

**SP:** What are other mistakes you find yourself making? Are there common themes to those that you can and pull out?

**RH:** The stoics talk about the passions. Today, obviously, we talk about passion being a good thing, but I would say that the root of most mistakes, both personally and historically, is one of the passions. Envy, lust, anger, fear, pain, worry. Those emotional states that take us out of the rational part of ourselves and into some sort of frenzied or consumed part.

**SP:** The way I think about that is they nudge us against reason. They make us more instinctive and less reasoning at the same time. And those are the very moments that humans, unlike any other sort of mammal can say, 'I'm going to put a two-second pause on this and I'm going to think before I instinctively respond.' Just because those instincts might have served me well in the Savannah, they're not necessarily going to serve me well here.

**RH:** It's often precisely in situations in which we are overcome by passion that we have the slimmest margin for error. ■



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