

## NAVAL RAVIKANT INTERVIEW PART FOUR

Hello again, Ars Technica listeners. This is the fourth & final installment of my conversation with serial entrepreneur Naval Ravikant about existential risks. If you haven't heard some (or all) of the earlier segments – which we started posting on Monday – I suggest you go back and do that first.

Also on Ars today, Andrew Hessel – the founder & CEO of Humane Genomics – has posted a fantastic opinion piece, in which discusses the prospects of building a highly distributed manufacturing base for printing vaccines, and medicine-on-demand. This could be a life-saving – and even civilization-saving – defensive layer for modern society in the near future, when bad people & good people alike will have Promethean synbio capabilities.

I made this very point about distributed biomanufacturing in my TED talk – on Andrew's excellent suggestion. I personally thought it was one of my talk's most powerful points. And so, I'm delighted and honored that Andrew's expanded on this subject on Ars Technica today, and I strongly recommend that you read his piece. It will bring rays of optimism to even the darkest synbio pessimist.

Speaking of optimism (yes, really!), I now bring you the fourth and final installment of my conversation with Naval. As before, we'll repeat the last minute or so of the previous segment, to reset context for you. And here we go:

### TRANSITION MUSIC

**Naval:** This is going to be a little sappy but my conclusion is that you're not going to be able to stop them purely through surveillance, or creating a totalitarian society, or Big Brother watching, because that creates its own immune response. And you're not going to be able to stop them by stopping technology, for all the reasons we've already talked about. So, really, the only way is to not create them in the first place. And to not create them, means that we all just need to learn how to make sure nobody goes unloved. The one part where the immune system analogy breaks down a little bit here is we're not talking about an external threat to the human body. We're talking about an internal threat to the human body so it's more like a cancer cell.

**Rob:** Cancer cell, yes.

**Naval:** Exactly. So don't let cancer arrive in the first place.

**Rob:** Although one of the things that I learned at this wedding over the weekend is that our immune system actually is taking out cancer constantly.

**Naval:** That's true.

**Rob:** It does, successfully, rally itself. And it's only when cancer gets out of control and figures out a way to foil the immune system that it goes away. So a cancer cell is still something that an immune system can rally against. And I think, you've really just hit on the first layer – if we can talk about it like a communication stack. The first layer is making sure that people don't feel unloved and alone.

**Naval:** Prevention in the first place.

**Rob:** That's the first layer. The second thing is also really inexpensive. I'll just call it "imagination," for lack of a better term. The 9/11 example is a really, really strong one where we lacked that least expensive input of imagination. When I look at that, I can't say that it was a lack of foresight because we had actually hardened the airports throughout the world in reaction to terrorism in the 1970s. It wasn't a lack of resources because the world governments have probably literally spent trillions of dollars preventing a sequel to 9/11 since it happened, so we can't say we were impoverished for resources.

We can't say it was for a lack of brain power because although Osama bin Laden was very charismatic, he had a great deal of money, he had a lot of strengths; nobody ever thought that he was an Einstein-level genius. So he came up with an *non*-ingenious plan. And the team that he then assigned it to is fairly under-powered. They're not very comfortable navigating in this alien society that they find themselves in, probably not any more than I would be, trying to navigate my way through Saudi Arabia. They're a fairly scrawny lot. They're not all that bright. A lot of the people didn't even realize that they were on a suicide mission. And they pull this thing off.

On our side, we had the resources, we had the foresight, we had the brainpower. But we never give anyone the job of supplying the imagination. We might have – I don't know. Populated a conference room with a bunch of really smart people from a bunch of different cultural backgrounds, probably over-representing parts of the world that it had a lot of experience with terrorism. In 2001, that would have been Sri Lanka, maybe still Ireland, certainly the Middle East.

You know, as a country of immigrants, we get to tap into all kinds of perspectives – and just said, "Hey, you guys in this conference room. What you do 40 hours a week, 60 hours a week – we can give you all the pizza and beer that you need. You just sit down and think *really* hard about the low-tech, cheap things that relatively underfunded, understaffed, under-geniused organizations, like Al Qaeda, might be able to pull off. And just use your imagination."

Like, "OK, We're dealing with terrorists. What have they done a lot of?" "Well, since the '80s, there've been a lot of suicide attacks, starting in Lebanon kind of in a military situation." "OK, Suicide attacks. Well also, they hijack a lot of planes." That's thing number two. Maybe you have seven things on the board. But you don't have 1000 things. Then you start thinking, "Well, what's some crazy suicide airplane thing? Have we ever seen such a thing?" And then hopefully somebody would say, "Yes there were 3,000 of them in the biggest war in American imagination, World War II. They were called Kamikaze." That doesn't feel like a terribly expensive investment. Just having some smart people ideating on, what could be done with the tools that we have now and the tools that we have five years hence.

**Naval:** Generally, governments only tend to react to something after it's happened, they're not proactive. They're not known for that. Private industry tends to be better at being proactive. This Gatwick drone incident does increase the odds that now you will have governments thinking about what do drones mean for commercial aviation. I should add as a disclaimer that I am an investor in one company, SkySafe, that helps with security against drones, but it's a tiny investment. The reality is, although I think they're good for some things, I don't think they could stop many of the scenarios that we mentioned from happening. And there are other great drone security companies out there as well. I think DroneShield is another one of them. I think AirWare has some software.

**Rob:** Yes, and correct me if I'm wrong, you probably have several hundred small investments in various startups.

**Naval:** Yes.

**Rob:** Something like that.

**Naval:** That's correct.

**Rob:** So I'm personally confident that there is zero chance that this entire conversation has been an ingenious manipulation by you to get SkySafe equity more valuable, but you are very--

**Naval:** If that was the case, they owe me a lot more stock.

**Rob:** A lot more stock. But you are very, very good to note that. It's always good to hoist the flag over potential conflicts.

**Naval:** Back to my original point, the drone incident at Gatwick means that governments will start trying to develop an immune response.

**Rob:** Yes, governments might start getting ham-fisted and reactive. But we can also probably count on companies like DJI, really powerful drone companies, to say, "Oh my God, I don't want to be eradicated here. I don't to be regulated out of existence. I'm going to start an immune response as well." An interesting example might be the film industry. There was concern that the government was going to start regulating. So the industry came up with its own PG, PG-13, rated G, et cetera standards.

I think that the best defense, particularly when we talk about synthetic biology, can and should come from the industry itself and even from the professors in universities that train the people who are going into the industry. That euphemistic conference room, in which people are constantly thinking about what could be done and what we could do now to protect against this – that should be part of the discipline of synthetic biology. And if that is, to some degree, formalized in training – and it's formalized in industry associations, and maybe something like the W3C, only for synbio, that has regular meetings. That could be, potentially, our most powerful weapon against this.

**Naval:** Something like AI, less likely much further away, but it's scary because there's no time to develop an immune response.

**Rob:** It's too late once it's happened.

**Naval:** It's instant when it happens, exactly. Even something like a major synbio attack could get to a catastrophic level very quickly. We haven't really seen minor designer synbio attacks yet.

**Rob:** Well, I'll actually give you the example that kind of proves the rule. The anthrax attacks in 2001 are really sealed in my memory because as it happened, I was in the Senate Majority Leader's office, Tom Daschle, the day that a letter arrived at Daschle's office with anthrax in it. That particular letter didn't infect anybody, but several people were killed. And it ultimately was traced back to a very, very senior weapons researcher. That's a chilling precedent, when you think about it. We were probably as well-organized of a military industrial complex as the world has ever seen.

And we – even with all of our good intentions and open society and strong protection measures – we couldn't prevent some highly weaponized anthrax from getting out of one of

*our* bio labs and into the office of the senate majority leader! *We* couldn't do that. So how can we expect an entire diffused industry of tens of thousands, hundreds of thousands of synbio experts – how can we expect all that diffusion to keep a lid on itself? It only can happen with a multi-level immune response, starting with looking after people so they don't feel unloved, secondly by infusing this imagination into the industry and also into government and elsewhere.

**Naval:** Then next comes the training of the immune system. Which is, any attack that does happen or was attempted to happen, we figure out what that looked like, what we can learn from it, and we start training pockets of people around the world to keep an eye out for these things and respond to them. Ideally, we could also crowdsource it; filtering the air for any unknown new pathogens. You had George Church, you had a great podcast with him, where he talked about essentially scanners that can figure out what's in the room. That can map viruses crossing the globe in real-time. And these can be privatized almost – like, buildings can install them. The new Teslas have these amazing bio-defense HEPA filters.

**Rob:** Really?

**Naval:** Yes, there's a Bioweapons Defense Mode in the new Tesla where you hit a button and the AQI comes down to 7 – even when I'm driving through the current smoke laden Bay Area. Why aren't those installed in every new house? These are all short to medium term, and I think these are all things that we need to do. But if you're talking about long-term solutions – this is a horrible dystopian one, I don't want to live in it. But you're born, and there is a chip implanted inside of you, and it basically monitors your mood. And the moment you get actually suicidal, it just turns you off.

**Rob:** Talking about the storytellers who've prefigured certain things – that almost sounds like the V-chip of South Park, times 100.

**Naval:** Right, exactly. The problem is, this would be a totalitarian nightmare. But maybe there is a more benign version of it, where instead of surveillance from above, it's sousveillance from below – where it's all of us keeping tabs on each other. Now unfortunately, this turns into a neighborhood watch creepy thing where it's like, your neighbors are watching you. But if someone is going suicidal – especially if they're a life sciences PhD student – you don't necessarily treat them as someone who should just get help. It's someone who should actually be watched and maybe even put inside an institution until they are better. I think there is the obvious practical stuff of just being far more careful and regulated about who gets access to these facilities, these technologies, and this know-how. But even that's only going to work for so long.

**Rob:** For me, I get my relative optimism, first of all from some of those examples from the past like getting through the Cold War. There's also the positive aspect that we outnumber this hypothetical person or group, that might want to bring the curtains down on humanity, by a factor of several billion to one. There's more of us, and we're thinking about this earlier. These people who detonate in a rampage murder way, when they go off, they tend to grab the implements at hand. That's why there's so many mass shootings in the United States, mass stabbings in China. Occasionally the thing that's at hand might be the throttle of an airplane, but this isn't an aspirational career.

**Naval:** It's true. You don't learn to fly a plane so you can fly it into the ground.

**Rob:** Exactly. When somebody snaps, as they have done in thousands of well-documented cases, they tend to grab the implements at hand with the training they already have. Now,

sometimes, they might plan and scheme for a period of days, maybe even weeks, I don't know, maybe even months. But it's not like you have an adult Stewie Griffin – you know, the evil baby in *Family Guy* – that spend decades positioning him or herself to annihilate the entire world.

If Andreas Lubitz, the Germanwings pilot, wasn't a pilot, he might've gone crazy with a knife. Because he was in Germany, probably he couldn't get a machine gun at retail, right? He wouldn't have gone to flight school for four years and worked his way into the position that he could do his thing. So the immune system that rises up is going to be inside that environment where that person might be empowered. Again, back to synbio – nobody, I don't think, is going to become synthetic biologist so that after they get their PhD, and do their postdoc, and their professorship, and they get great access to a lab that'll have 20-years-from-now technology, they'll be able to end the world. No.

What we have to worry about is somebody in that inner sanctum snapping – and then doing something within a span of probably a few days, to weeks, to months, that is diabolical and catastrophic. And a much narrower set of things that could potentially be done because of the inherently narrow timeframe. I mean, 99.99% something high percent of synthetic biologists sure as hell don't want this to happen.

They will come up with, and be able to access ideas that you and I can't because they are expert in their technology. One relatively simple thing that's already being done is if somebody is requesting a print out of the pathogenic sequence of DNA, the system writ large should, A, refuse to make that pathogen and B, alert the authorities. Now, in this early time that we're living in right now, there aren't desktop printers that are capable of making full-blown viruses. But when an organization like Twist Bioscience, which recently went public – they work as a service bureau – and they will provide people with sequences.

When a pathogenic sequence is ordered – I don't know if one ever has been, but my understanding is that the protocol is if one is ever ordered – they ain't going to fill that order. And they're going to help people get to the bottom of what's going on. I think we can rely on the good intentions and the imagination of the crushing majority of people in any given field, like synthetic biology, to think through those catastrophic scenarios – provided that there is an institutionalized desire to use our imagination in that manner.

There's an institutionalized desire to think about the most twisted things people could do with the tools that are coming online before somebody else thinks of those things. That's why I'm confident that if this imagination – and it's a painful imagination, it won't be fun to think these things through – but if that's part of the discipline of synbio, most of the really crazy things will probably be thought of years in advance. And countermeasures can be taken that aren't that intrusive, but are just clever and foresighted.

**Naval:** There are a couple of ways that are far fetched, that I can imagine, even in the long term. One is we just invent some brand new technology that is defensive in nature. We did that recently with encryption. Encryption is much better for the defender than the attacker. The attacker has to brute force a nearly infinite number of solutions, whereas the defender can very easily protect themselves on digital encryption.

**Rob:** That's a really good example. So that is an asymmetry in which the defender is asymmetrically empowered against an attack.

**Naval:** Exactly. So the question is, can we invent something like that in synthetic biology? Is there an advance to be made, especially with a lot of resources, and a lot of good people looking at it, that could aid the defender?

**Rob:** And let's talk about what not to do. I think that the top of your list and mine is a technology ban.

**Naval:** Well, it's impossible. The problem is, if you ban technology, then a few countries would say, "We're still going to keep developing technology." Let's say North Korea and China go for it. Then all you've done is left yourself behind. So the only way to have a technology ban is basically to start World War III. [laughs]

**Rob:** Yes. And internally within our own society, it's worth noting that illicit drug labs are both illegal and ubiquitous. This is not something like the creation of a nuclear bomb, which needs to marshal the entire resources of a nation state. You could be doing amazing synthetic biology in your own living room, and the neighbors wouldn't necessarily notice.

The other reason that I'm personally very much opposed to a technology ban, is because I look at some of the things that are going on right now in synthetic biology, and I find it to be purely exhilarating. I believe that synthetic biology is on the cusp of curing the organ shortage. That's going to relieve so much death and misery from all quarters of this world. It's amazing. I think synthetic biology is going to make clean meat, which is going to be an ethical triumph for conscious systems in general, and also for issues like global warming. Synbio is going to accomplish so much. And throttling it in its crib would be, A, impossible, as you just pointed out, and B, a terrible immorality. It's not something we want to do.

**Naval:** Technology is a coin, and one side of it is immortality, and the other side is annihilation.

**Rob:** That's a very good way of putting it. Did you just come up with that?

**Naval:** Yes. [laughs]

**Rob:** I like that.

**Naval:** I'm a happy libertarian, but I think this is one of those cases where it does make sense for the government to pay attention. It goes back to your original point, which is, now the gains are privatized, the losses are socialized, and you're dealing with very catastrophic outcomes. Humanity is a public good.

**Rob:** The survival of humanity is the ultimate public good.

**Naval:** There are other good scenarios, if we want a little bit of hope. [laughs]

**Rob:** It's time for a little bit of hope.

**Naval:** Hope is in short supply. If you look at how we connect with our phones all the time, we're much more in-tune with other people and their feelings and where they are in their lives and so on. It's not too much of a stretch to imagine that our children who will actually get cybernetic implants, which will keep them connected to the internet at all times. Once you're cybernetically implanted and connected to the rest of humanity, you become almost like a cell in a multi-celled organism.

Now, that's voluntary. It's not some involuntary horrible thing. But now, your friends and family and loved ones can see your mood and see when you're about to detonate, for example. I think that there are support systems that we can create through technology that will help raise our consciousness to a new level, and our connectedness to a new level.

At some point, if somebody tries to end the world, it'll be because they weren't loved enough.

**Rob:** Yes. That gets to your other point of, let's not make more of these people who get to this horrible, horrible point. Easy as it would be to have feelings of hatred for Andreas Lubitz, the pilot for Germanwings, this was a person who was in horrible agony and pain and suffering – and did something reprehensible. We should not create people like that. If we're a gentler society, or if social media behaves in a more supportive and less tearing-down way – fewer and fewer people are going to be pushed in that direction.

**Naval:** Before, we used to find love and longing in our family and our tribe. Now we live in cities, disconnected from our ancestors and our immediate family. And we're looking for ways to connect. We're looking to create new tribes and new families, and I think people are using all tools at their disposal to do that. Burning man is kind of this crazy festival in the desert where people go and connect with 70,000 strangers as if they're family. They're radically inclusive. And a society like that is just going to have a lot fewer people detonating – and if they do they can be easily intercepted and noticed and cared for.

Generally, when someone is depressed and they kill themselves, deeply, internally they feel alone. We are headed towards a society of more and more connectedness. Whether it's through meditation, whether it's through spirituality, whether it's through psychedelics, whether it's through consciousness festivals, whether it's through parties, whether it's through social media whether it's through the internet, whether it's through cellphones. It doesn't matter. But the more connected we can be as humans, the better off we are.

**Rob:** I think there's also less reluctance to use certain tools that might be very powerful in counteracting these things. When we think in terms of these thousand people who detonate annually – even if society or the government takes the most self-centered approach to that, the inevitable conclusion is the things like treatment-resistant depression and treatment-resistant post-traumatic stress are societal dangers.

They don't just present the danger to the person who is suffering from PTSD or suffering from treatment-resistant depression. But they could present a danger to anybody in the movie theater if they go nuts with a machine gun or perhaps anybody in the world if they go crazy with a DNA synthesizer in 30 years. And it seems that they are some pretty powerful tools to fight these things.

There are advanced phase free trials in Europe using psilocybin for treatment-resistant depression showing an enormous amount of promise – and I interviewed the people behind that experiment in an earlier episode of this podcast. And simultaneously, in the United States, there is a phase three trial going on under the auspices of the FDA testing the potential for MDMA – molly or ecstasy – in treating treatment-resistant PTSD. We got this societal aversion to using these chemicals in any kind of a clinical setting in the wake of the 60s because of the horror that the psychedelic era has imposed on certain elements in society.

**Naval:** It's insane that we take any substance that's bioactive, when you take it in your mouth and it causes a change in your feelings, and we ban it. The reality is some of these make you much better off. So if you have a chance of detonating I would rather society spirits you off

into a beautiful farm somewhere to hang out in the fields and do all the psilocybin and MDMA that you need until you basically get through accelerated therapy. That's worth it.

**Rob:** MDMA actually dates back to World War I. That's when the molecule was first created. And psilocybin, I think, was discovered by non-indigenous cultures around the 50s. LSD was first synthesized in the 1930s. These are very much in their 0.9 form. And then, we banned any kind of clinical research into their potential – and not only their potential but into their modification and their enhancement.

Imagine if all the muscle and budget and imaginative resources that the pharmaceutical industry has available to it – if they had spent 30 or 40 years trying to create the 2.0, 3.0, 4.0 versions of these molecules that we stumbled into back during World War I. Given that these seem to have tremendous potential against PTSD, depression and other things we would probably have far more effective remedies today. Well, it seems that kind of development and invention and imagination is about to be applied to these fields.

Maybe that is something that can radically reduce the number of people who are inclined to detonate.

**Naval:** I think related to that, meditation is making a huge surge in the Western world. And actually, the reason I was slightly late when you came today was because my meditation was too good. So I ignored the timer when it went off. And I kept going. That's not to humble or brag or anything, it's just that I've found that if you can really get into it, it's so good that it just brings a sense of peace and joy into your life that no one can take from you. And it's a shame that it's not really on offer like, let's say in high school.

**Rob:** Yes. Why not just be part of gym class for ten weeks.

**Naval:** Yeah, it's exercising your mind, but we don't teach that skill. It doesn't cost anything. You don't need anything. And it's probably better than most drugs over a long period of time and it's better than most therapies, I would even argue, at least from my personal experience. I think these kinds of consciousness raising tactics combined with prudent scenario planning; restricting access to some things that individual just should not have access to; creating a shared vocabulary; popularizing the concepts so that essentially every human has their own immune response to this and understands it.

Identifying when people are taking privatized gains and socializing the losses – calling that out and saying, "Hey, there's no amount of skin in the game you can have that makes it worthwhile, because you're putting our skin in the game without our permission."

**Rob:** Yes. Making that like the ultimate crime, Creating an enormous amount of social awareness and also social shame around socializing a cost.

**Naval:** I give credit to people like Elon Musk for starting to speak out on it and he's financed the OpenAI project and thinks he's going to get us to Mars. But that's not enough. He actually should even talk louder. He does talk. I really appreciate that.

**Rob:** And thank God for that. But, we need 10 more like him or a thousand more like him.

**Naval:** We need a thousand more like him.

**Rob:** So the antibodies that we can muster – first of all a gentler society that has fewer people detonating, fewer people killing themselves, fewer people being lonely. Is using the tools and allowing the pharmaceutical industry to develop the tools that are most promising in this area.

**Naval:** What if we rated the pharmaceuticals on how much they lowered suicide risks?

**Rob:** Yes. And maybe the fact that a very significant external risk is being posed by these types of mental states could raise the urgency around it.

**Naval:** I would also vote to have a Manhattan project around the kinds of scanners that George Church was talking about.

**Rob:** Bio scanners.

**Naval:** Exactly.

**Rob:** Yes. That give very, very early warnings leading.

**Naval:** We need to take it to the next level.

**Rob:** The other thing is, some people could listen to this talk and say, well, the last thing we want to do is have CRISPR education in high schools. I actually say the first thing we want to do is have CRISPR education in high schools. I think we need to acknowledge that the vast majority of people are good guys rather than bad guys. I've researched it pretty carefully, and I can think four instances in which commercial pilots have downed their planes intentionally killing everybody onboard. That's over a span of decades. There are tens of thousands of commercial flights every single day.

The crashing, overwhelming majority of commercial pilots obviously refrain from doing that, even though they could. The crashing majority of synthetic biologists would refrain from doing that if they could. And if part of their training was also thinking about what one bad seed might possibly do. If that was part of the discipline of synbio, then the more synthetic biologists we have the safer we are – not the more endangered we are.

**Naval:** Right.

**Rob:** We just need to have that imagination – slightly paranoid imagination, yes – but that imagination. Those ghost stories, these nightmares, be part of the training process. And that's how we create an immune system that can prevent his.

**Naval:** And this will pay benefits even if there is not an incident like the one that we're talking about.

**Rob:** Totally.

**Naval:** You'll just have less colds. You'll have less Ebola. You'll have less of every kind of virus and bacteria spreading.

**Rob:** I guess a big question is whether people and society, writ large, want to mentally engage with these dangers for decades. All the time we spent envisioning nuclear winter might have saved our lives, but it wasn't exactly fun.

**Naval:** I think just like with the tendency to not look at the screen in a horror movie and to not want to get bad news and to shoot the messenger for bad news. It's built in to us as humans and instinct to face away from it, to deny it.

**Rob:** Much as I enjoy hanging with you, I don't think this has been a very fun conversation.

**Naval:** No, this is not going to be a viral podcast, no pun intended. Because I think people don't want to spread bad news or even bad thoughts – because people think that if I don't think the bad thoughts it won't happen. But think of it sort of like as the union of concerned scientists came up after nuclear weapons were invented. These were people who knew them well. They knew what they were capable of and they did their best to get their message out. They built the doomsday clock. They worked tirelessly against nuclear proliferation.

They did come up with the horror scenarios of nuclear winter ending all life on the earth and so on. They had to popularize that and, yes, there were some over reactions. There were kids doing drills, running in the basement and hiding underneath their desks in case of a nuclear strike, but we needed that to get the message of nuclear nonproliferation out there very, very strongly. And I would argue that nuclear proliferation is a genie that has been kept in the bottle to a much greater degree than anyone imagined in 1950s.

**Rob:** Against all odds. What smart observer in 1946 would have imagined that 70 plus years would go by without a nuclear weapon being fired in anger?

**Naval:** Right. So it's better to have a slow, measured, trained immune system response than wait until something happens. Then there's a cytokine storm. Then there's multiple wars, surveillance, crack-downs, police state. That's not where we want to end up. We want to be a free and civil society. And so that means having a measured approach to this rather than being reactive to this.

**Rob:** The nuclear example is an incredibly powerful one and triples my confidence that hopefully getting this term Ender out there in a way that people understand the term and spread it, and hopefully people not shunning this odious, grim conversation that we've had and spreading it to some degree can spread the kind of awareness that we need. One of the most amazing things in geopolitical history, in my opinion, was in 1990-'91 after the fall of the Soviet Union, four newly-born countries voluntarily denuclearized.

I think it was Ukraine, Kazakhstan maybe it was Uzbekistan and I think one of the other post-soviet republics had nukes on their land. How improbable, when you think about it, for four countries-- that's probably more countries that have nuclearized since 1998. I think there's really only been three. India, Pakistan and North Korea. And the reason that they did that – this crazy geopolitical move – was because humanity had spent 45 years telling itself ghost stories about what could happen and what we wanted *to* avoid. That's an amazing, nigh miraculous thing that did happen because we were brave enough to think about it and worry about it.

So these disaster-modeling exercises, which are kind of like prophylactic nightmares, can be very effective. Of course, let's hope the synbio-nightmares and the AI nightmares we're promoting right now will look like totally unnecessary exercises 50 years from now. Like the duck-and-cover drills that schools used to do during the Cold War. But we're happy when precautions turn out to be unnecessary. If we fasten the seatbelt when we start our car, we're not annoyed if we don't get into an accident.

**Naval:** There's a great Arabic aphorism that I love that says, "Trust in Allah, but tie your camel."

**Rob:** [laughs] That's good. Well, thank you so much for spending so much time and having such a crazy brainstorming conversation with me.

**Naval:** Thanks. On the one hand I hope we didn't terrify people, on the other hand I hope we did wake them up a little bit.

**Rob:** Yes, it's time for us to start thinking about this stuff.

### **END INTERVIEW ELEMENT OF PART THREE**

So there you have it: the end of two intriguing hours with the ever-fascinating Naval Ravikant. I'd like to thank Naval again for his extreme generosity in spending all that time with me – and for sharing so many great ideas. We'd both given immense thought to these issues before we sat down, and we both brought everything we had to the conversation. The result was a true synergy of thinking – and that synergy directly became the superstructure of my TED talk. I truly can't thank Naval enough for that.

Finally – and this is meant as FYI, and definitely *not* as hard-sell, so please take it the intended spirit – A bit over a thousand people support The After On Podcast on Patreon. Those who do so at a level of \$5/month or more unlock many, many hours of exclusive audio, upon which I lavish incredible attention and care.

That archive includes two really interesting conversations with Naval. One is about the creation & potential of the amazing platform he built called AngelList. The other is about cryptocurrency. Naval is a noted thinker on that subject and I learned a ton about crypto from our conversation. If you're interested in that, you can find it at [Patreon.com/RobReid](https://Patreon.com/RobReid).

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Thank you so much for listening.

### **OUTRO MUSIC**