Birds aren't real? How a conspiracy takes flight

Hi, I'm Peter. And six years ago, I received information that changed the course of the rest of my life.

From 1969 through 2001, the US government murdered over 12 billion birds in the American skies. They did this using poisonous toxins dropped from airplanes that was contagious and murdered all of the birds over the course of about 40 years. Now, I know this is not the public understanding of this and may sound absurd, but please just bear with me and keep an open mind and just be respectful, please, as I share this information with you.

I know a lot of you may be wondering why would the government kill 12 billion birds? It seems like an awful lot of trouble for a government to go through. The reason is as devastating as it is simple. For each bird the government killed, they replaced it with a surveillance drone replica in disguise designed to spy on the American people.

Now ... Some may say, if you're the government, at least, that this is a worthy sacrifice, these 12 billion lives, for the safety of the people, right? I don't know about that, it seems like a pretty serious limit on our freedom, wouldn't you agree?

The proof that birds are robots is all around us, if you start looking. For starters, birds charge their batteries on power lines --

So they can refuel up high and they can watch the civilians, you know. They also track civilians using a liquid tracking device.

You ever wonder why birds poop on your car? Do you need more evidence? Really, I can go all day up here. Who here has seen a baby pigeon? You haven't, have you? It's weird. There's all these adult pigeons where are all the babies? They come out of the factory as adults, so ...

There's no organic growth, you know. It's a smoking gun.

Over the years, as I began putting this information together, I began realizing the extent of all this. And there were times I wished I never even learned this. My life would be so much easier. You know, I remember before I knew this information, I was happier, my steps were lighter, you know. But I always come back to this. It is my moral obligation as one of the few privileged enough to know this, to share it with you, the blind sheep, you know.

And that's what I've been doing for years now. I'm a part of a movement called Birds Aren't Real. And in 2021, I was promoted to public information officer for the movement. It's the honor of my life. I had one job. Oh, thank you, thank you.

Thank you.

My one job was to deprogram the public from the bird lie. And deprogram is a very specific word because you all are programmed. You know that, right? We live in a pro-bird civilization drenched in propaganda. For instance, every state has a state bird, the national mascot is a bald eagle, presidents don't talk, they tweet, then the tweets are covered on the bird-logo media. Once I knew this, my first order of business was to get the information out to the American people, get off the internet into the real world. So that's what I did. I bought a van, covered it in decals with facts. I wanted to turn the highway into an information highway, awaken the people. I went city to city, holding rallies, meeting up with our thousands of supporters, growing by the day. And I was putting up billboards wherever we went, sharing our simple but powerful message. Look how beautiful it is. Now, the government,

the government did take note of what we were doing and they sent some intimidators to try and deter us from our mission. You can see them right there.

But we did not fold. We kept on going. We started holding rallies at some of the most evil pro-bird corporations in the world, starting with Twitter, where we brought hundreds out to protest their pro-bird logo. Months later, we brought 500 people out to CNN headquarters to demand fairer coverage for bird truthers on air. Then just last year, we brought 2,000 people out to Washington Square in New York City to demand that the mayor shut down every pigeon in the city.

Here's what that looked like.

(Crowd shouting) Birds aren't real! Birds aren't real! Birds aren't real! Birds aren't real!

Can't even tell you how that felt. I took that video standing on the top of the van, megaphone in hand, knowing we were awakening a country that needs it so badly. I can't think of anything more beautiful.

OK, let me start this talk over. I do not actually believe that birds are robots. And everyone else in this picture is also in on the bit. This is a character that I played for four years. The leader of a fake movement with fake evidence and a fake history. Our goal was to convince the public that our satirical movement was a real one. And see if the media would believe what we were saying. To do this, I played this character that I just showed you. We held rallies, put up billboards. We even sent the media a lot of fake evidence. We hired an old actor to pose as an ex-CIA agent confessing to his crimes. We sent them a historic email leak called "Poultry Gate" that came out of the Pentagon,

where we forged hundreds of fake emails exposing elites and government officials in the bird drone surveillance plot. It didn't take much to convince the media. After just one summer holding rallies like this, it became nationally syndicated news on tons of local news stations that we were a real movement that had been around for 50 years. And there was a resurgence happening where it was coming back and there was a radical new leader, myself, bringing the movement back as the rise of conspiracy theories swept the nation.

At this point, I'm sitting on my couch, watching the media report on my fake movement as a real one and figure it is probably time to come out of character. One, because we'd accomplished what we came there to do. But also, I didn't want this to snowball in anything that was never supposed to. So in 2021, I broke character, revealed the movement was a farce on the front page of The New York Times. And I was very proud, as you can see.

Allow me to reintroduce myself one more time. Hi, I'm Peter. Can you say, "Hi, Peter?"

(Audience) Hi, Peter.

Hey. I'd like to tell you a little bit about myself. I grew up in Arkansas in Little Rock, where I was home-schooled on the outskirts of town. The community that I grew up with was hyper conservative and religious, and almost everyone that I knew believed in some form of conspiracy theory, whether it was that Obama was the Antichrist or that there are microchips in the vaccines. During my entire life, I always felt like I was on the fringes of normal society. So, as you can imagine, when it became time for me to play a character, the conspiracy theorist was a pretty easy one for me to tap into. During the years in character, I used the same cadence, logic and arguments as those I grew up around, just with a different theory swapped in. I was really dedicated to playing this character as convincingly as I could, as method as possible. So I spent days, sometimes, in character, a lot of time out in public with the van there, just talking with strangers. It led to hundreds of interactions with strangers who thought that I was a real conspiracy theorist. I'd often be out there, cowboy hat on, handing out fliers that said things like, "If it flies, it's spies."

We had another flyer that said, "Birdwatching goes both ways."

And during these times, as I'm handing out flyers and talking with people, there were hundreds, maybe thousands of instances over the years where strangers would approach me. You know, they'd see me in public and I'd see them notice me. And walk up to me with complete disdain on their face. They thought that I was a real conspiracy theorist. And time and time again, they'd come up to me, look me right in the eyes, just as close as I am to you right here, and they would tell me how stupid I am. They'd tell me I was uneducated, that I was crazy. That I was the problem with this country. When this happens, I didn't feel the emotions of the character that I thought I would. My out-of-character self may interpret these interactions as a funny response to someone that fell for the comedy project, but instead I felt the emotions of the character. I felt emboldened and I felt sad and angry. Like they didn't even take the time to know me. They instantly condemned me, judged me and othered me. I'd found myself on the opposite side of this equation that I'd grown up around, the normal and the fringe. And in those moments when those people were talking to me, they could not have been more ineffective at what I would assume they really want. Less conspiracy theorists in the world. These experiences, hundreds of them over the years, watching how people interact with those on the fringes of our society gave me an entirely new perspective on our approach to conspiracy theorists, whether it's how we frame them in the conventional media, to how we deal with those in our own lives. If our goal is to live in a shared reality with our neighbors, what if our current approach isn't bringing us any closer to that? What if by talking to conspiracy theorists like they're ignorant and stupid, we're actually pushing them farther away from the truth that we want them to see? Because what happens when someone tells you that you're stupid, you're all wrong, you're the problem? You'll feel judged and dismissed. And most importantly, you’ll feel othered, which may lead you to look for safety in those who are like-minded to do what they have been doing for you. Affirm your selfhood, give you a sense of identity, belonging. These are some of the most basic human desires.

We have to consider that conspiracy theorists are not just joining these groups for no reason. They're getting rewards out of these, things that we are all looking for, a sense of purpose, community.

I grew up with the internet and during my time with this project, especially out of character, people have talked to me about the misinformation age and this, you know, terrifying problem of online echo chambers and conspiracy theorists. But I want to remind us that there are humans behind a lot of these screens. It's not just numbers. Everyone’s unique experience influences their own narrative about the world, and there's no blueprint for how to deal with this yet. But I do not think that online echo chambers of conspiracy theorists are this inevitable symptom of life online. The internet is about 30 years old and things are changing quickly, and I think it'll be very important that we develop new solutions for these new problems on a fundamental level.

What if by addressing belief before belonging, we're starting the conversation at the wrong place? Instead of sitting in collective bewilderment and frustration about how these people could believe these things, these crazies, what if we first looked under the hood and thought about what made them vulnerable to this information in the first place? What might they be getting out of this that they're not getting in their everyday lives? How much does it have to do with a different truth, or how much does it have to do with the community that that truth brings?

We need to think about people's circumstances and reference points, to see them as fellow human beings who want to believe in something and want to belong, just like all of us do in this room. Because if we continue with our current approach of arguing on the level of belief, it's not going to get us anywhere. We're going to end up with more echo chambers, more disinformation and more polarization.

Instead, we can do the harder work of looking into what is fueling the need for an alternate truth. Not only would this lend us more empathy for those who think differently than us, but I really think this might be the only actually productive means, productive means, of moving toward the shared reality that we all want to live in. Let's direct our energy toward the crisis of belonging. And then maybe we will understand the crisis of belief.

Before I go, I'll leave with one more word. Just don’t forget: if it flies, it's spies.

# What are the most important moral problems of our time?

This is a graph that represents the economic history of human civilization.

[World GDP per capita over the last 200,000 years]

There's not much going on, is there. For the vast majority of human history, pretty much everyone lived on the equivalent of one dollar per day, and not much changed. But then, something extraordinary happened: the Scientific and Industrial Revolutions. And the basically flat graph you just saw transforms into this. What this graph means is that, in terms of power to change the world, we live in an unprecedented time in human history, and I believe our ethical understanding hasn't yet caught up with this fact. The Scientific and Industrial Revolutions transformed both our understanding of the world and our ability to alter it. What we need is an ethical revolution so that we can work out how do we use this tremendous bounty of resources to improve the world.

For the last 10 years, my colleagues and I have developed a philosophy and research program that we call effective altruism. It tries to respond to these radical changes in our world, uses evidence and careful reasoning to try to answer this question: How can we do the most good? Now, there are many issues you've got to address if you want to tackle this problem: whether to do good through your charity or your career or your political engagement, what programs to focus on, who to work with. But what I want to talk about is what I think is the most fundamental problem. Of all the many problems that the world faces, which should we be focused on trying to solve first? Now, I'm going to give you a framework for thinking about this question, and the framework is very simple. A problem's higher priority, the bigger, the more easily solvable and the more neglected it is. Bigger is better, because we've got more to gain if we do solve the problem. More easily solvable is better because I can solve the problem with less time or money. And most subtly, more neglected is better, because of diminishing returns. The more resources that have already been invested into solving a problem, the harder it will be to make additional progress. Now, the key thing that I want to leave with you is this framework, so that you can think for yourself what are the highest global priorities. But I and others in the effective altruism community have converged on three moral issues that we believe are unusually important, score unusually well in this framework.

First is global health. This is supersolvable. We have an amazing track record in global health. Rates of death from measles, malaria, diarrheal disease are down by over 70 percent. And in 1980, we eradicated smallpox. I estimate we thereby saved over 60 million lives. That's more lives saved than if we'd achieved world peace in that same time period. On our current best estimates, we can save a life by distributing long-lasting insecticide-treated bed nets for just a few thousand dollars. This is an amazing opportunity.

The second big priority is factory farming. This is superneglected. There are 50 billion land animals used every year for food, and the vast majority of them are factory farmed, living in conditions of horrific suffering. They're probably among the worst-off creatures on this planet, and in many cases, we could significantly improve their lives for just pennies per animal. Yet this is hugely neglected. There are 3,000 times more animals in factory farms than there are stray pets, but yet, factory farming gets one fiftieth of the philanthropic funding. That means additional resources in this area could have a truly transformative impact.

Now the third area is the one that I want to focus on the most, and that's the category of existential risks: events like a nuclear war or a global pandemic that could permanently derail civilization or even lead to the extinction of the human race. Let me explain why I think this is such a big priority in terms of this framework.

First, size. How bad would it be if there were a truly existential catastrophe? Well, it would involve the deaths of all seven billion people on this planet and that means you and everyone you know and love. That's just a tragedy of unimaginable size. But then, what's more, it would also mean the curtailment of humanity's future potential, and I believe that humanity's potential is vast. The human race has been around for about 200,000 years, and if she lives as long as a typical mammalian species, she would last for about two million years. If the human race were a single individual, she would be just 10 years old today. And what's more, the human race isn't a typical mammalian species. There's no reason why, if we're careful, we should die off after only two million years. The earth will remain habitable for 500 million years to come. And if someday, we took to the stars, the civilization could continue for billions more.

So I think the future is going to be really big, but is it going to be good? Is the human race even really worth preserving? Well, we hear all the time about how things have been getting worse, but I think that when we take the long run, things have been getting radically better. Here, for example, is life expectancy over time. Here's the proportion of people not living in extreme poverty. Here's the number of countries over time that have decriminalized homosexuality. Here's the number of countries over time that have become democratic. Then, when we look to the future, there could be so much more to gain again. We'll be so much richer, we can solve so many problems that are intractable today.

So if this is kind of a graph of how humanity has progressed in terms of total human flourishing over time, well, this is what we would expect future progress to look like. It's vast.

Here, for example, is where we would expect no one to live in extreme poverty. Here is where we would expect everyone to be better off than the richest person alive today. Perhaps here is where we would discover the fundamental natural laws that govern our world. Perhaps here is where we discover an entirely new form of art, a form of music we currently lack the ears to hear. And this is just the next few thousand years. Once we think past that, well, we can't even imagine the heights that human accomplishment might reach.

So the future could be very big and it could be very good, but are there ways we could lose this value? And sadly, I think there are. The last two centuries brought tremendous technological progress, but they also brought the global risks of nuclear war and the possibility of extreme climate change. When we look to the coming centuries, we should expect to see the same pattern again. And we can see some radically powerful technologies on the horizon. Synthetic biology might give us the power to create viruses of unprecedented contagiousness and lethality. Geoengineering might give us the power to dramatically alter the earth's climate. Artificial intelligence might give us the power to create intelligent agents with abilities greater than our own. Now, I'm not saying that any of these risks are particularly likely, but when there's so much at stake, even small probabilities matter a great deal. Imagine if you're getting on a plane and you're kind of nervous, and the pilot reassures you by saying, "There's only a one-in-a-thousand chance of crashing. Don't worry." Would you feel reassured? For these reasons, I think that preserving the future of humanity is among the most important problems that we currently face.

But let's keep using this framework. Is this problem neglected? And I think the answer is yes, and that's because problems that affect future generations are often hugely neglected. Why? Because future people don't participate in markets today. They don't have a vote. It's not like there's a lobby representing the interests of those born in 2300 AD. They don't get to influence the decisions we make today. They're voiceless. And that means we still spend a paltry amount on these issues: nuclear nonproliferation, geoengineering, biorisk, artificial intelligence safety. All of these receive only a few tens of millions of dollars of philanthropic funding every year. That's tiny compared to the 390 billion dollars that's spent on US philanthropy in total.

The final aspect of our framework then: Is this solvable? I believe it is. You can contribute with your money, your career or your political engagement. With your money, you can support organizations that focus on these risks, like the Nuclear Threat Initiative, which campaigns to take nuclear weapons off hair-trigger alert, or the Blue Ribbon Panel, which develops policy to minimize the damage from natural and man-made pandemics, or the Center for Human-Compatible AI, which does technical research to ensure that AI systems are safe and reliable. With your political engagement, you can vote for candidates that care about these risks, and you can support greater international cooperation. And then with your career, there is so much that you can do. Of course, we need scientists and policymakers and organization leaders, but just as importantly, we also need accountants and managers and assistants to work in these organizations that are tackling these problems.

Now, the research program of effective altruism is still in its infancy, and there's still a huge amount that we don't know. But even with what we've learned so far, we can see that by thinking carefully and by focusing on those problems that are big, solvable and neglected, we can make a truly tremendous difference to the world for thousands of years to come.

# A powerful new neurotech tool for augmenting your mind

I became obsessed with the relationship between the brain and the mind after suffering a series of concussions playing football and rugby in college. I felt my mind change for years after. I was studying computers at the time, and it felt as though I had damaged my hardware and that my software was running differently. Over the following years, a close friend suffered a serious neck injury and multiple friends and family members were struggling with crippling mental health issues. All around me, people that I loved dearly were being afflicted by ailments of the nervous system or the mind.

I was grappling with all of this while pursuing an MFA in Design and Technology at Parsons when a friend and fellow student showed me an open-source tutorial on how to build a low-cost single-channel EEG system to detect brain activity. After a couple long nights of hacking and tinkering, I saw my brainwaves dancing across the screen for the very first time. And that moment changed my life. In that moment, I felt as though I had the possibility to help myself and the people I loved. And I also realized that I couldn't do it alone. I needed help.

So in 2013, in Brooklyn, with some like-minded friends, I started OpenBCI, an open-source neurotechnology company. In the beginning, our goal was to build an inward-pointing telescope and to share the blueprints with the world so that anybody with a computer could begin peering into their own brain. At first, we were an EEG-only company. We sold brain sensors to measure brain activity. I thought that's what people wanted. But over time, we discovered people doing very strange things with our technology. Some people were connecting the equipment to the stomach to measure the neurons in the gut and study gut-brain connection and the microbiome. Others were using the tools to build new muscle sensors and controllers for prosthetics and robotics. And some were designing new devices and peripheral add-ons that could be connected to the platform to measure new types of data that I had never heard of before.

What we learned from all of this is that the brain by itself is actually quite boring. Turns out brain data alone lacks context. And what we ultimately care about is not the brain, but the mind, consciousness, human cognition.

When we have things like EMG sensors to measure muscle activity or ECG sensors to measure heart activity, eye trackers and even environmental sensors to measure the world around us, all of this makes the brain data much more useful. But the organs around our body, our sensory receptors, are actually much easier to collect data from than the brain, and also arguably much more important for determining the things that we actually care about: emotions, intentions and the mind overall.

Additionally, we realized that people weren't just interested in reading from the brain and the body. They were also interested in modulating the mind through various types of sensory stimulation. Things like light, sound, haptics and electricity. It's one thing to record the mind, it's another to modulate it. The idea of a combined system that can both read from and write to the brain or body is referred to as a closed-loop system or bidirectional human interface. This concept is truly profound, and it will define the next major revolution in computing technology.

When you have products that not just are designed for the average user but are designed to actually adapt to their user, that's something truly special. When we know what the data of an emotion or a feeling looks like and we know how to make that data go up or down, then using AI, we can build constructive or destructive interference patterns to either amplify or suppress those emotions or feelings. In the very near future, we will have computers that we are resonantly and subconsciously connected to, enabling empathetic computing for the very first time.

In 2018, we put these learnings to work and began development of a new tool for cognitive exploration. Named after my friend Gael, who passed from ALS in 2016, we call it Galea. It’s a multimodal bio-sensing headset, and it is absolutely packed with sensors. It can measure the user’s heart, skin, muscles, eyes and brain, and it combines that capability with head-mounted displays or augmented and virtual reality headsets. Additionally, we're exploring the integration of non-invasive electrical neural stimulation as a feature. The Galea software suite can turn the raw sensor data into meaningful metrics. With some of the sensors, we're able to provide new forms of real-time interactivity and control. And with all of the sensors, we're able to make quantifiable inferences about high-level states of mind, things like stress, fatigue, cognitive workload and focus.

In 2019, a legendary neurohacker by the name of Christian Bayerlein reached out to me. He was actually one of our very first Kickstarter backers when we got started, early on. Christian was a very smart, intelligent, happy-go-lucky and easygoing guy. And so I worked up the courage to ask him, "Hey, Christian, can we connect you to our sensors?"

At which point he said, "I thought you would never ask."

So after 20 minutes, we had him rigged up to a bunch of electrodes, and we provided him with four new inputs to a computer. Little digital buttons, that he could control voluntarily. This essentially doubled his number of inputs to a computer. Years later, after many setbacks due to COVID, we flew to Germany to work with Christian in person to implement the first prototype of what we're going to be demoing here today. Christian then spent months training with that prototype and sending his data across the Atlantic to us in Brooklyn from Germany and flying a virtual drone in our offices. The first thing that we did was scour Christian's body for residual motor function. We then connected electrodes to the four muscles that he had the most voluntary control over, and then we turned those muscles into digital buttons. We then applied some smart filtering and signal processing to adapt those buttons into something more like a slider or a digital potentiometer. After that, we turned those four sliders and mapped them to a new virtual joystick. Christian then combined that new joystick with the joystick that he uses with his lip to control his wheelchair, and with the two joysticks combined, Christian finally had control over all the manual controls of a drone.

I’m going to stop talking about it, and we’re going to show you. Christian, welcome.

At this point, I'm going to ask everybody to turn off your Bluetooth and put your phones in airplane mode so that you don't get hit in the face with a drone.

How are you feeling, Christian?

Christian Bayerlein: Yeah, let's do it.

Conor Russomanno: Awesome. This is a heads-up display that's showing all of Christian's biometric data, as well as some information about the drone. On the left here, we can see Christian's muscle data. Christian is now going to attempt to fly the drone. How are you feeling, Christian, feeling good?

CB: Yes.

CR: All right. Rock and roll. Let's take this up for a joyride. Whenever you're ready.

CB: I'm ready.

CR: All right, take her up. And now let's do something we probably shouldn't do and fly it over the audience.

Alright, actually, let’s do this. I'm going to ask for people to call out some commands in the audience. So how about you? Straight forward. Straight forward.

Alright. How about you?

Man: Up!

CR: Not down. Oh, he's doing what he wants right now. Amazing.

Alright, let’s bring it back. And what I'm going to do right now is take control of the controller so that you guys know that there isn't someone backstage flying this drone.

All right, Christian, you're alright with that?

CR: Unplug. Forward. And we're going to land this guy now.

CB: I think I was better than you.

Now I'm going to unplug it so it doesn't turn on on its own. Perfect.

Christian has repurposed dormant muscles from around his body for extended and augmented interactivity. We have turned those muscles into a generic controller that in this case we've mapped into a drone, but what's really cool is that joystick can be applied to anything.

Another thing that's really cool is that even in individuals who are not living with motor disabilities, there exist dozens of dormant muscles around the body that we can tap into for augmented and expanded control interactivity.

And lastly, all the code related to that virtual joystick, we're going to open source so that you can implement it and improve upon it.

There's three things that have stood out to me from working on this project and many others over the years. One, we cannot conflate the brain with the mind. In order to understand emotions and tensions and the mind overall, we have to measure data from all over the body, not just the brain. Two, open-source technology access and literacy is one way that we can combat the potential ethical challenges we face in introducing neural technology to society. But that's not enough. We have to do much, much more than that. It's very important, imperative, that we set up guardrails and design the future that we want to live in. Three. It's the courage and resilience of trailblazers like Christian who don't get bogged down by what they can't do, but instead strive to prove that the impossible is in fact possible.

And since none of this would have been possible without you, Christian, the stage is yours.

CB: Yeah, hi, everybody.

Audience: Hi.

CB: I'm excited to be here today. I was born with a genetic condition that affects my mobility and requires me to have assistance. Despite my disability, I'm a very happy and fulfilled person. What truly holds me back are not my physical limitations. It's rather the barriers in the environment.

I'm a tech nerd and political activist. I believe that technology can empower disabled people. It can help create a better, more inclusive and accessible world for everyone.

This demonstration is a perfect example. We saw what's possible when cutting edge technology is combined with human curiosity and creativity. So let's build tools that empower people, applications that break down barriers and systems that unlock a world of possibilities. I think that's an idea worth spreading.

Thank you.