

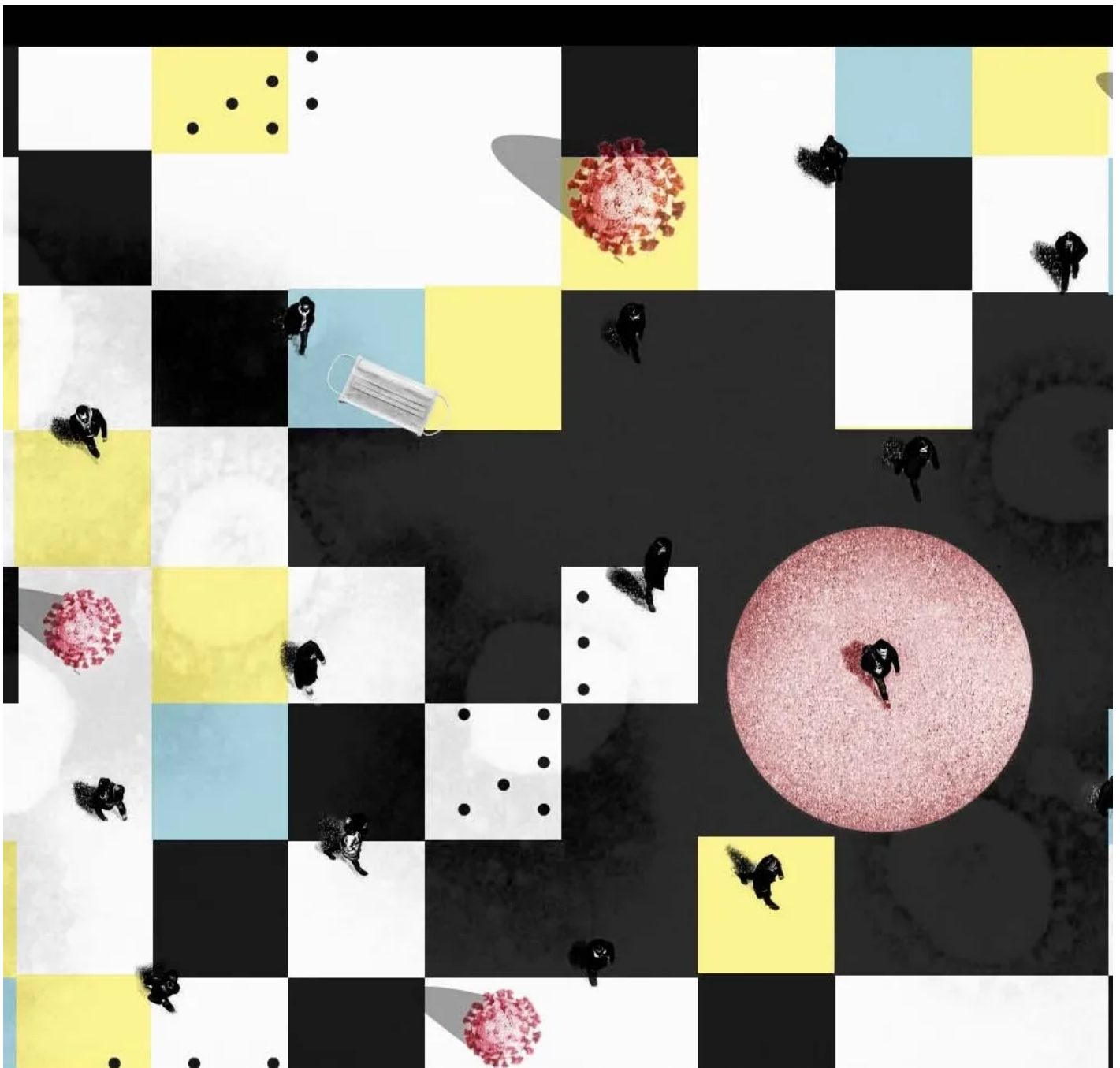
FUTURE PERFECT

How to future-proof your life from pandemics and other threats

You can prepare your brain for the next big disaster, biological or otherwise. A futurist explains how.

by **Sigal Samuel**

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Sigal Samuel is a senior reporter for Vox's Future Perfect and co-host of the Future Perfect podcast. She writes primarily about the future of consciousness, tracking advances in artificial intelligence and neuroscience and their staggering ethical implications. Before joining Vox, Sigal was the religion editor at the Atlantic.

Part of Pandemic-Proof, Future Perfect's series on the upgrades we can make to prepare for the next pandemic.

In 2010, game designer and forecaster Jane McGonigal invited nearly 20,000 people to imagine a future pandemic — and, for a few weeks, live as though it were real.

Specifically, McGonigal asked them to simulate a respiratory pandemic that originates in China in 2020 and travels around the world infecting millions of people. They practiced wearing masks in public. They wrote journal entries about how it feels to get quarantine orders. And they figured out how they'd use their unique skills to help others in this scenario.

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So when the real respiratory pandemic originated in China in 2020, they felt ready. They emailed McGonigal things like, “I’m not freaking out, I already worked through the panic and anxiety when we imagined it 10 years ago,” and, “Time to start social distancing!”

Increased mental resilience and an ability to adapt faster are among the benefits of simulating the future, according to McGonigal’s new book, Imaginable. She

explains how anybody can get better at forecasting the future and preparing for it. Crucially, you don't need to be invited into a large-scale game like the one above, which was dubbed EVOKE.

You can start by simply writing a journal entry as though you're living through a future threat — whether it's a new pandemic, a climate disaster, an incoming asteroid, or an emerging technology gone awry. Ask yourself questions like: What will I feel in this future? What will I and others need most? How will I use my unique strengths to help others?

Questions like these spark a “learned helpfulness” process that can make you feel empowered as you look ahead, says McGonigal, who directs games research at the Institute for the Future. I talked to her about how we can train ourselves to become better futurists, why making better forecasters out of the public can lead to better policy, and how simulations are processed in the brain. A transcript of our conversation, edited for length and clarity, follows.

Sigal Samuel

Before anyone ever heard of Covid-19, you ran not one but two big pandemic simulations. In 2008, you ran Superstruct, which simulated a respiratory pandemic. And in 2010, you ran a simulation called EVOKE for the World Bank, which imagined a respiratory pandemic plus other disasters happening at the same time — extreme weather from climate change, misinformation, and so on.

What did your simulations accurately predict?

Jane McGonigal

In these simulations, we gave the same scenario to everyone: There's a global respiratory pandemic, people are being asked to quarantine, schools might be closed. And we asked questions like: Under what circumstances would you violate an order to quarantine? The No. 1 thing we heard was for religious worship. People would go to church or synagogue even if it put them at risk. And of course we then saw that [with the real Covid-19 pandemic] early on, so much of the

superspreading was happening around churches and religious services, and a lot of the conflict that arose around shutdowns was in the context of freedom to gather for worship.

We also had people practice wearing masks out in public. We asked: How long would you be willing to wear one for? What would you want to take it off for? And we definitely saw participants report the friction and the discomfort with it. So we knew [at the start of the Covid-19 pandemic] that things that were going to interfere with our social interactions were going to be tricky.

We also saw moms worrying: What am I going to do if the schools are closed? Am I going to be able to work? And, of course, that turned out to be a serious economic issue — we saw a mass exodus of women from the workplace.

Sigal Samuel

You often get asked, “What’s the secret to making accurate future forecasts like Superstruct and EVOKE?” In your book, you say that it’s no great secret — just pay attention to what experts are warning you about. Specifically, you mention “signals of change” and “future forces.” Can you explain what you mean by those?

Jane McGonigal

Future forces are large-scale drivers of change. They’re like the winds of change, the hurricanes of change — you see them coming from very far off. For example, we know that extreme heat is one of the big future forces that we’re going to be grappling with for the next few decades. Not all future forces are bad — some are good. Universal basic income is one that I’m really excited about.

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You can know what the future forces are; there are reports and publications that do a really good job of conveying this. Make it a habit every year to go read the World Economic Forum's Global Risks Report that comes out in January. It's 500 to 1,000 experts saying what keeps them up at night and how likely they think the different risks are. You don't have to make it your job to do something about it. Just put it in your brain so you're primed to pay attention when signals of change emerge.

Signals of change are specific events, news stories, or breakthroughs that are happening now. They're clues to what the future might be like.

Wuhan was a signal. And then Italy was a signal. And then New York City was a signal. The problem for most people is that they look at one instance of change and they see it as isolated; they don't understand the pattern it's a part of. If you make it a habit to look for signals of change, you just get better at spotting these growing risks faster.

Sigal Samuel

I think of the signals and future forces as stars versus constellations. If my mind is primed to know that there might be an entire constellation in this patch of sky, then if I see one star — one signal — my mind won't assume this is an isolated incident. It'll think there's probably a bunch of other stars in this patch of sky.

Jane McGonigal

That's a great analogy. And there's actually something fun about looking for signals of change, in that you are kind of playing connect-the-dots.

Sigal Samuel

What is the main goal of running a pandemic simulation? Should we be thinking of these simulations more as a tool to influence policymakers or to influence regular citizens?

Jane McGonigal

My personal belief up until the year 2020 was that the primary purpose of these simulations was to have a transformative impact on the participants ... to create more people who are more flexible in their thinking about the world. I see it as a skill set we're trying to diffuse across the planet — that if we have millions of people who have already thought about this kind of crisis, that will diffuse during the real crisis.

Now, having seen hard-to-predict social consequences fairly well predicted by players, I would like to make an effort to translate some of these experiences into more actionable advice. To give [policymakers] actionable information, like, “Here are going to be the main obstacles and here are going to be the top conspiracy theories, so you can think about countering them.”

Sigal Samuel

Most of the pandemic simulations I'd heard of pre-Covid seem to have been run with academic experts and government officials in the hopes of getting policymakers to break out of the pandemic panic-neglect cycle — to prime them to take pandemic prevention seriously and respond well if a crisis actually happens. How hopeful are you that we can run simulations that are actually effective at shaping policymakers' decisions?

Jane McGonigal

It really depends on your theory of change. With simulations as they've historically been run within government, I'm not sure anybody has the authority to act on what they find, because of bureaucracy [that constricts what any one expert or official can do about pandemic policy]. But when we have ordinary people play these simulations out in the real world, it's like a rehearsal for demanding action. We should as a public be able to demand policy or change with our own foresight.

It's not just to put pressure on [officials] to enact the policy, but also to give them permission. It's easier to change policy or invest in future risk when there's social demand for it. So I do think it's necessary for the public to be involved for these simulations to really drive substantive policy change.

Sigal Samuel

We're seeing right now, for example, that Congress is not devoting nearly enough funding to preventing the next pandemic. So you're saying maybe if the public were more primed in our imaginations to anticipate that another pandemic is absolutely coming and we should invest more in preventing it, our pressure would give Congress permission to fund that?

Jane McGonigal

Exactly. Now, this is very optimistic. The largest simulations I've run have 20,000 people. This is assuming we could get that number up to 200,000 or 2 million. I don't know of any significant funding source for this type of work. Part of the reason I wrote this book is to try to create a movement of people who want to invest in this idea of simulating futures with the public and not just behind closed doors.

Sigal Samuel

In terms of getting these simulation skills out there, is this something that we should be teaching as part of the curriculum in every high school and college, in

the same way that many now teach critical thinking or critical reading skills?

Jane McGonigal

Absolutely. One of the big moonshots for the Institute for the Future is to get futures thinking into more high school and university classrooms. We're actually partnering with some projects to do that. In California, there's a project called California 100. We've been helping them develop future scenarios for the future of California over the next 100 years, and they're looking to engage high school students and college students in this type of futures thinking as a way of trying to build out this skill set in the population.

Sigal Samuel

Why do we need simulations to build this skill set? Why can't we just have fiction?

Jane McGonigal

The thing about a social simulation is that you're imagining yourself in a future scenario. It's not a character; you're not role-playing someone other than yourself. It's really you. And so you're creating memories in your mind of the future that are actually very similar to real memories. It becomes easier for you to imagine these things you've never experienced because you're committing the information to your brain in a different way, where it feels more like a personal lived experience than some kind of vicarious narrative.

The core mechanic of these simulations is essentially five-minute journal entries from the future. We ask you to take five minutes to write in as vivid detail as you can: What are you doing on this day that's different because there's a pandemic? What emotions are you feeling? We ask people to write it down as if it's already happened so that it becomes a memory rather than an abstract fact.

And this is the big thing that really drives my work: the difference between abstract facts and lived experience in terms of how the brain processes

information.

Sigal Samuel

What is the difference, neurologically, between how each of those gets processed?

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Jane McGonigal

In the field of neuroscience, there have been thousands of papers written in the past decade about exactly what happens when you imagine the future. They parse out essentially two networks of future thought.

One is semantic, which is basically just: What are the facts about this future? This is mostly hippocampus-driven. When most of us think about the future, we tend to think about it in that very abstract, semantic way.

But then there's episodic futures thinking (EFT), which engages many more regions of the brain. It's where we try to picture ourselves living through the future. It's almost like watching a movie in our mind. We can look around and really see and hear and touch, and we tell stories about our lived experiences of something in the future.

I try to create a world where literally anybody can look around and say, "Oh, hey, I can see how this would affect me, and here's how I would feel or act." That's something futurists have not always been good at. Futurists often write very abstract reports. And it's just hard for people to understand what it means for them.

Sigal Samuel

You write about studies showing that the emotions you feel during EFT are just as psychologically powerful as emotions that you actually experience in the present.

The intensity of emotion that you feel can make an imagined future more vivid and salient, so you're more likely to pay attention to it or be motivated to act on it. Are there other benefits to EFT?

Jane McGonigal

The other aspect is that if you're pre-feeling negative emotions, it can be a kind of therapeutic intervention against future trauma. Essentially you can do exposure therapy to some of these scenarios, so that instead of feeling emotions like shock and anxiety, the feelings that come up first are more like pre-recognition or familiarity.

That's really interesting because those are positive emotions. Pre-recognition is the sense of, "I saw this coming." It gives you a kind of confidence, right? Your brain says, "I was smart enough to know this is possible." Just that tiny spark of positive emotion can help you pivot from shock or denial or helplessness so you can move faster into preparing yourself and helping others.

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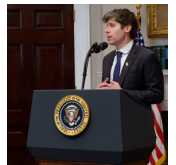


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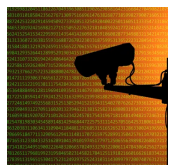


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