

March 19, 2020 [11:49pm EDT]

Greetings on the first equinox of the year. This letter is, I promise, not specifically about the coronavirus, and hopefully it will come as a welcome distraction from the news. It contains no requests of you (aside from your attention, should you wish to read further).

The equinoxes have quietly been among my favorite days since 2008. On September 22 of that year I was to moderate a daily investment meeting with 100 people in the room, dozens more on video, and hundreds more listening or watching privately in conference rooms or on their computers. Some were on the other side of the world, staying up late or skipping lunch, to be present in what was still called “The Morning Meeting” in Boston. Whenever I moderated, I sought to welcome everyone by describing something that we all shared, regardless of distance. For this meeting it occurred to me that I could wish people a happy equinox.

Preparing the day before, for the first time, I really thought about the equinox. The sun is directly in line with the equator. Or, as I picture it, Earth’s axis is perpendicular to a line between the equator and the sun, illuminating both of the poles at the same time. It’s a lovely mental image.

The equinoxes come in March and September and are days of unconscious commonality. Few notice an equinox because it isn’t the “most” or “least” of anything, but without much observation, every person—and plant and animal and everything else on or near the surface of the earth—gets 12 hours between sunrise and sunset. No matter your longitude or latitude, you get the same length of day as everyone else. (Or as the roots “equi” and “nox” imply, everyone gets equal night.)

I had intended for some time to have my first Probable Futures letter go out on the equinox to make readers slightly more aware both of the physical planet we all live on, and of the fact that we share it in ways that can be strange and unnoticed. As it turns out, people began being much more attuned to the physical world—and having a dramatic experience of strange commonality—about 2 weeks before this equinox, due to the spread of COVID-19.

Several years ago, I set out to understand climate change. Like all of you, I had heard quite a lot about it, but, perhaps like most of you, it remained abstract and vague in my mind. I decided I'd take time to learn what I could. Within months I was seeing the world differently, not just because of climate change but because, like actually understanding the equinox for the first time, I became aware of the physical world around me in wondrous ways that turned out to be intuitive and valuable. "Why didn't I know this?" was my reaction to most of it.

Over the ensuing months and years, I came to understand more deeply how modern life—what Probable Futures and I will mostly refer to as "civilization"—was built on an unconscious, commonly-held assumption of stability. Moreover, the stable climate that gave us weather in consistent ranges of hot and cold, dry and wet, etc. was ideal for humans. No place on earth was too hot for us to live, and the vast snow-covered expanses that we found inhospitable were wordlessly acting as giant air conditioners and mirrors to keep our equilibrium in place.

The fact that it had required a conscious effort on my part to investigate climate change for weeks, and then months, and finally years on end to make these discoveries was alarming. Mostly on my own, I came to understand the extent to which everything I had previously spent my time thinking and caring about—in particular, the institutions and patterns that create prosperous societies—and everything I had not paid attention to or had not cared about, was built on the foundation of this specific, stable climate. Gradually I began to see the physical world, the very one outside my window right now, in ways that made me curious, grateful, attentive, and deeply worried.

Perhaps the most surprising discovery was the one that made me most hopeful and eager. It turned out that everything I learned about how the physical world works was intuitive. Yes, there is deep, powerful, expert science at the bottom of "our" understanding of how our planet works, but the upshot of almost every component of earth- and atmospheric science is something that anyone with a sixth-grade education can understand in ways that deliver those same senses of wonder, curiosity, and understanding. In addition, the

changes that are happening now and are coming soon are comprehensible in ways that make the processes and implications of climate change vivid. I started to see climate science as not only intuitive and vivid, but extremely useful. I worked for years in finance where experts prize models that are slightly better than random, while an excellent forecast of our world lay unused.

My idea for Probable Futures was to give people something to help them understand and explore the physical world, what's coming, and what the consequences of climate change might be—so that then, with the same kind of clarity that I have enjoyed, they could make better decisions and tell better stories about the future.

## What is Probable Futures?

What started as an idea and an intention is now becoming real. It is exciting and hopeful. It also brings me joy as I have seen people who, like me, had other day jobs, other obsessions, and other areas of expertise come to understand the world in new ways that have made them want to collaborate and act. They are bringing their skills and imaginations to this work in ways I never could.

This community has structure. Alison Smart is the Executive Director of Probable Futures, our science partner is the award-winning [Woods Hole Research Center \(WHRC\)](#), our technology is being built by [Postlight](#), our visual design and branding is being led by [Moth Design](#), the folks at [Rho AI](#) are helping build a robust system for our data and WHRC's, and a number of other companies and individuals are making us all better.

We agree that we need to change how we think about, talk about, and plan for the future of our society and our planet. We need better frameworks, better tools, better information, and much better storytelling to help people prepare for—and choose between—the futures that our planet and atmosphere offer us.

One of the most important and poorly appreciated aspects of climate change is that its effects will be felt everywhere, by everyone. While this makes the problem daunting in scope and challenging in complexity, it has the benefit

that everyone is involved. Everyone can do something. And all of our institutions can take part. I don't want to overplay the comparisons with COVID-19, but it might interest you to know that working on Probable Futures has proven to be good preparation for these times.

### Making a better future more probable.

We seek to make thinking about the physical world—the relationship between civilization and the climate, and the instability we now face—integral and intuitive in every facet of life. I have worked in environments where the world was seen through the lens of money and prices. I have also spent time with people who see the world principally through lenses as different as culture, data, and risk. What people in all of these fields have told me is that, when shown the physical world as we are doing, they can incorporate it into their lives and work in ways they never had before.

The first task for Probable Futures is creating tools to understand the physical world more clearly. In the coming months we look forward to sharing beautiful interactive maps that will allow you to see heat, drought, rainfall, and other weather phenomena for every place on the planet for the past and present, and for the probable futures that lie ahead. Will this past summer in Australia be average in a world that is slightly warmer than today? How many days per year will cross thresholds of human health in Mumbai? In Orlando, Florida? In a small town on the edge of the African grasslands? When I look for a house using an online realty service can I see how often to expect inundation? Drought? Wildfire?

These kinds of specific, vivid, proximate questions are rarely part of climate discussions, and climate discussions are rarely part of decision-making. Indeed, our colleagues at WHRC have done interesting, novel work to answer some of these questions because they simply hadn't been asked before. If you're a reader of scientific journals, you can look out for some of the work that supports Probable Futures in the coming months and years.

I think you will be amazed, startled, and oddly comforted by what we know about what is coming. It shows the ranges we are leaving, the thresholds we

will likely cross, and the risks that come from each fraction of a degree warmer the system gets. I am sure you will find it clarifying and helpful. I am hopeful you will want to both use it and share it.

We aim to partner with courageous leaders and prominent organizations—without cost or compensation—to show how this perspective and these tools can be applied in different sectors and spheres of influence, making it possible to pursue practical approaches to the problems posed by climate change, both in terms of adaptation and mitigation. We are building a robust infrastructure to allow other institutions to design and host their own maps, backed by the world's best science, so that their communities can use these tools. If you lead or are part of an institution or community that would like to host maps of the future probable climates, we are here to help you.

We are hopeful that if people use these tools they will improve the health and wellbeing of our institutions and communities, protect the vital ecosystems that our economies and cultures depend upon, and safeguard the prosperity of our future generations.

### A gift

If we succeed, Probable Futures will be like an extremely useful gift. Lately I've been comparing it to a cookbook given by a friend. The best cookbooks have clear recipes that include explanations for how and why they work and good companion dishes. If you read the front of the cookbook you will get a sense of where the author is coming from, and if you take a little time to follow a couple of recipes closely you will be nourished in at least two ways. Even better, though, in the months and years thereafter you will find that a recipe can be not only made again and again but be shared and tailored to your tastes, circumstances, and sensibilities. Gradually you won't quite remember where you learned it.

Almost all of us are cooking more now that we are at home, so this comparison may feel apt, even to those who only do the dishes. Last night I made my wife Lisa's favorite dish, an already-modified Roman pasta, yet further adapted to what was available at the nearby shop and ravaged grocery

store. She asked me where the original recipe came from. I replied that it had to have come from somewhere, but that I couldn't recall. She put down her very clean fork after the last bite and proclaimed the results, on the eve of this memorable equinox, the best yet.

Again, I hope that you and yours are well. Thank you for reading to the end of this letter. The next one will come on the June solstice, when the northern hemisphere will be bathed in light and the southern hemisphere will be as dark as it gets. That installment will be less elliptical, and will come with real things that Probable Futures can share. Successive letters will come on equinoxes and solstices. They will likely grow more specific and practical and might even qualify as "news" in some sense, but since what Probable Futures and I are working on is really an effort to understand and improve life, I doubt we will ever call this a "newsletter."

We are building a distribution list to share our work as it comes to fruition. If you would like to be kept informed, and if you would like to receive my equinox and solstice letters, please send us a note at [hello@probablefutures.org](mailto:hello@probablefutures.org). We will stay in touch. In the meantime, if you would like to say hello to me, I would be happy to hear from you.

Onward,

A handwritten signature in black ink, appearing to be 'Spencer Glendon', written in a cursive style.

Spencer Glendon  
Founder