

# FUTURE NEWS

TO CONNECT, TO INFORM AND TO INSPIRE

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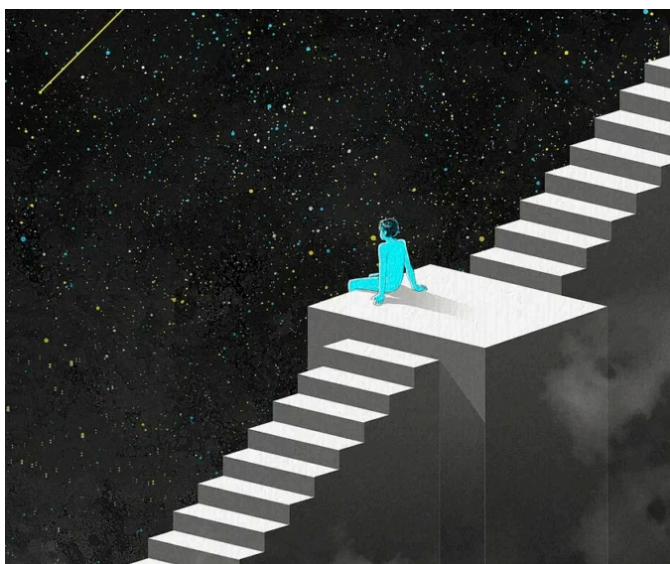
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# LONGTERMISM: THE FUTURE IS VAST WHAT DOES THIS MEAN FOR OUR OWN LIFE?

by Max Roser



If we keep each other safe—and protect ourselves from the risks that nature and we ourselves pose—we are only at the beginning of human history.

Our actions today impact those who will live in that vast future that is ahead of us.

- Our impact can be negative—for example, when we degrade the environment that future generations will inherit from us, or when we develop technologies that create risks for them.
- But our impact can also be positive—by developing science that allows these future generations to live healthier lives, or by building a culture that enriches their lives in the way that our history enriches our lives.

The fact that our actions have an impact on the large number of people who will live after us should matter for how we think about our own lives. Those who ask themselves what they can do to act responsibly towards those who will live in the future call themselves ‘longtermists.’ Longtermism is the ethical view that we should act in ways that reduce the risks that endanger our future, and in ways that make the long-term future go well.

## OUR PAST

Before we look ahead, let’s look back. How many came before us? How many humans have ever lived?

It is not possible to answer this question precisely, but demographers Toshiko Kaneda and Carl Haub have tackled the question using the historical knowledge that we do have.

There isn’t a particular moment in which humanity came into existence, as the transition from species to species is gradual. But if one wants to count all humans one has to make a decision about when the first humans lived. The two demographers used 200,000 years before today as this cutoff.

The demographers estimate that in these 200,000 years about 109 billion people have lived and died.

It is these 109 billion people we have to thank for the civilization that we live in. The languages we speak, the food we cook, the music we enjoy, the tools we use—what we know, we learned from them. The houses we live in, the infrastructure we rely on, the grand achievements of architecture—much of what we see around us was built by them.

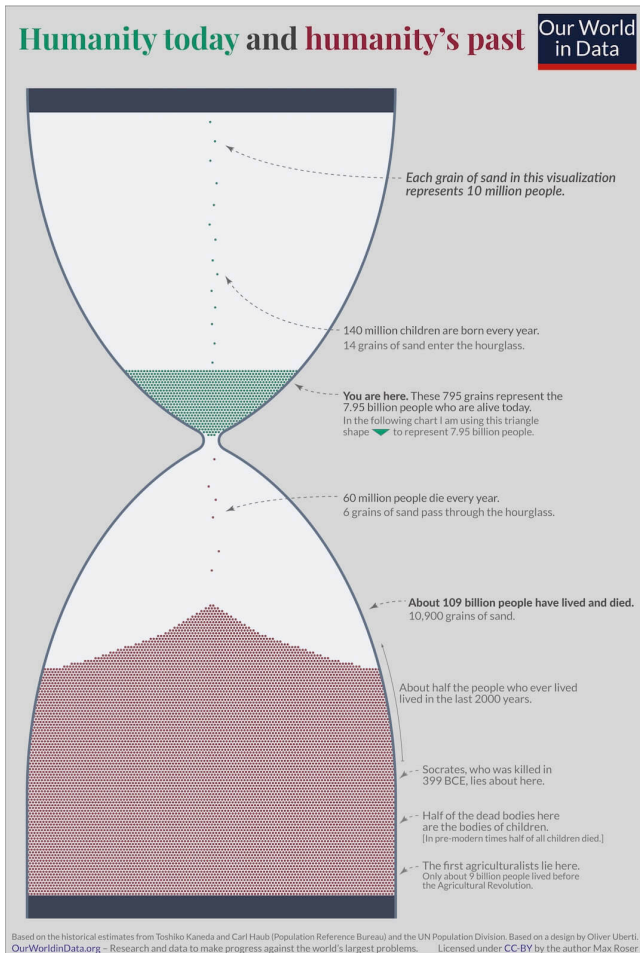
## OUR PRESENT

In 2022 7.95 billion of us are alive. Taken together with those who have died, about 117 billion humans have been born since the dawn of modern humankind.

This means that those of us who are alive now represent about 6.8 percent of all people who have ever lived.

These numbers are hard to grasp. I tried to bring it into a visualization to put them into perspective.

It’s a giant hourglass. But instead of measuring the passage of time, it measures the passage of people. Each grain of sand here represents 10 million people: each year 140 million babies are born. So we add 14 grains of sand to the hourglass. Every year, 60 million people die; this means 6 grains pass through the hourglass and are added to the large number of people who have died.



## OUR POTENTIAL FUTURE

How many people will be born in the future? We don't know. But we know one thing: The future is immense, and the universe will exist for *trillions* of years. We can use this fact to get a sense of how many descendants we might have in that vast future ahead.

The number of future people depends on the size of the population at any point in time and how long each of them will live. But the most important factor will be how long humanity will exist.

Before we look at a range of very different potential futures, let's start with a simple baseline. We are mammals. One way to think about how long we might survive is to ask how long other mammals survive. It turns out that the lifespan of a typical mammalian species is about one million years. Let's think about a future in which humanity exists for a million years: 200,000 years are already behind us, so there would be 800,000 years still ahead.

Let's consider a scenario in which the population stabilizes at 11 billion people (based on the UN projections for the end of this century) and in



which the average life length rises to 88 years. In such a future, there would be 100 trillion people alive over the next 800,000 years.

The chart below visualizes this. Each triangle represents 7.95 billion people—it is the green triangle shape from the hourglass above and corresponds to the number of us alive today.

Each row represents the birth of half a trillion children. For 100 trillion births there are 200 rows.

If you disagree with the numbers I use in my scenario it is easy for you to see how different numbers would lead to different futures. Here are two examples:

- If you think the world population will stabilize at a level that's 50 percent higher in my calculation, then the number of future births will be 50 percent higher. The chart would be 50 percent wider. It would show the births of 150 trillion children.
- If you think the world population will have a size of just one billion people, then the chart would be only an eleventh as wide and would show 9.1 trillion births.



The chart shows how many children might be born in the next 800,000 years, a future in which humans survive for as long as a typical mammalian species.

But, of course, humanity is *anything but* “a typical mammalian species.” One thing that sets us apart is that we now—and this is a recent development—have the power to destroy ourselves. Since the development of nuclear weapons, *it is in our power to kill all of us who are alive and cause the end of human history.*

But we are also different from all other animals in that we have the possibility to protect ourselves, even against the most extreme risks. The poor dinosaurs had no defence against the asteroid that wiped them out. We do. We already have effective and well-funded asteroid-monitoring systems and, in case it becomes necessary, we might be able to deploy technology that protects us from an incoming asteroid. The development of powerful technology gives us the chance to survive for much longer than a typical mammalian species.

Our planet might remain habitable for roughly a billion years. If we survive as long as the Earth stays habitable, and based on the scenario above, this would be a future in which 125 quadrillion children will be born. A quadrillion is a 1 followed by 15 zeros: 1,000,000,000,000,000.

A billion years is a thousand times longer than the million years depicted in this chart. Even very slow-moving changes will entirely transform our planet over such a long stretch of time: a billion years is a timespan in which the world will go through several supercontinent cycles—the world’s continents will collide and drift apart repeatedly; new mountain ranges will form and then erode; the oceans we are familiar with will disappear and new ones open up.

But if we protect ourselves well and find homes beyond Earth, the future could be *much* larger still.

The sun will exist for another five billion years. If we stay alive for all this time, and based on the scenario above, this would be a future in which 625 quadrillion children will be born. How can we imagine a number as large as 625 quadrillions? We can get back to our sand metaphor from the first chart.

We can imagine today’s world population as a patch of sand on a beach. It’s a tiny patch of sand that barely qualifies as a beach, just large enough for a single person to sit down. One square meter.

If the current world population was represented by a tiny beach of one square meter, then 625 quadrillion

people would make up a beach that is 17 meters wide and 4,600 kilometers long. A beach that stretches all across the USA, from the Atlantic to the Pacific coast.

And humans could survive for even longer.

What this future might look like is hard to imagine. Just as it was hard to imagine, even quite recently, what today might look like. “This present moment used to be the unimaginable future,” as Stewart Brand put it.

## OUR RESPONSIBILITY IS VAST

A catastrophe that ends human history would destroy the vast future that humanity would otherwise have. And it would be horrific for those who will be alive at that time.

The people who live then will be just as real as you or me. They will exist, they just don’t exist yet. They will feel the sun on their skin and they will enjoy a swim in the sea. They will have the same hopes, they will feel the same pain.

‘Longtermism’ is the idea that people who live in the future matter morally just as much as those of us who are alive today. When we ask ourselves what we should do to make the world a better place, a longtermist does not only consider what we can do to help those around us right now, but also what we can do for those who come after us. The main point of this text—that humanity’s potential future is vast—matters greatly to longtermists. The key moral question of longtermism is ‘what can we do to improve the world’s long-term prospects?’

In some ways, many of us are already longtermists. The responsibility we have for future generations is why so many work to reduce the risks from climate change and environmental destruction.

But in other ways, we pay only little attention to future risks. In the same way that we work to reduce the risks from climate change, we should pay attention to a wider range of potentially even larger risks and reduce them.

I am definitely frightened of these catastrophic and existential risks. In addition to nuclear weapons, there are two other major risks that worry me greatly: pandemics, especially from engineered pathogens, and artificial intelligence technology. These technologies could lead to large catastrophes, either by someone using them as weapons or even unintentionally as a consequence of accidents.

## **LARGE RISKS ARE NOT ONLY A PROBLEM IN THE FUTURE—THEY ARE A REALITY NOW**

We don't have to think about people who live billions of years in the future to see our responsibilities. The majority of today's children can expect to see the next century. Some of our grandchildren might live long enough to see the 23rd century. A catastrophe in the next decades would be horrific for people very close to us.

The focus of this text is the long-term future, but this shouldn't give the impression that the risks we are facing are confined to the future. Several large risks that could lead to unprecedented disasters are already with us now. The use of the nuclear weapons that exist at this moment would kill millions immediately and *billions* in the 'nuclear winter' that follows. Not enough people have registered how the situation we are in has changed. AI capabilities and biotechnology have developed rapidly and are no longer science fiction; they are posing risks to those of us who are alive today.

Similarly, this text focuses mostly on the loss of human lives, but there would be other losses too: nuclear war would devastate nature and the world's wildlife; existential catastrophes would destroy our culture and our civilization.

The point is that even if we only consider the impact of these risks on the present generation and only consider the potential loss of lives, they're among the most pressing issues of our time. This is *much more* the case if we consider their impact beyond mortality and their impact on future generations.

## **THE REDUCTION OF EXISTENTIAL RISKS IS ONE OF THE MOST IMPORTANT TASKS OF OUR TIME, YET IT IS EXTREMELY NEGLECTED.**

The current pandemic has made it clear how badly the world has neglected pandemic preparedness. This illustrates a more general point. By reducing the risk of the catastrophes which would endanger our entire future—for example, the very worst possible pandemics—we would also reduce the risk of smaller, yet still terrible, disasters, such as Covid-19.

As a society, we spend only little attention, money, and effort on the risks that imperil our future. Few of us are longtermists. Only very few are even thinking about these risks, when in fact these are problems that should be central to our culture. The unprecedented power of today's technology requires unprecedented responsibility.

Technological development made the high living standards of our time possible. I believe that a considerable share of the fruits of this growth should be spent on reducing the risks and negative consequences of particular technologies.

More researchers should be able to study these risks and how we can reduce them. I would love to see more artists who convey the importance of the vast future in their work. And crucially I think it needs competent political work. I imagine that one day countries will have ministries for the reduction of catastrophic and existential risks and some of the world's most important institutions will be dedicated to the far-sighted work that protects humanity.

It will be too late to react once the worst has happened. This means we have to be proactive; we have to see the threats now.

The current situation in which these risks are hardly receiving any attention is frightening and depressing. But it is also a large opportunity. Because these risks are so very neglected, a career dedicated to the reduction of these risks is likely among the best opportunities that you have if you want to make the world a better place.

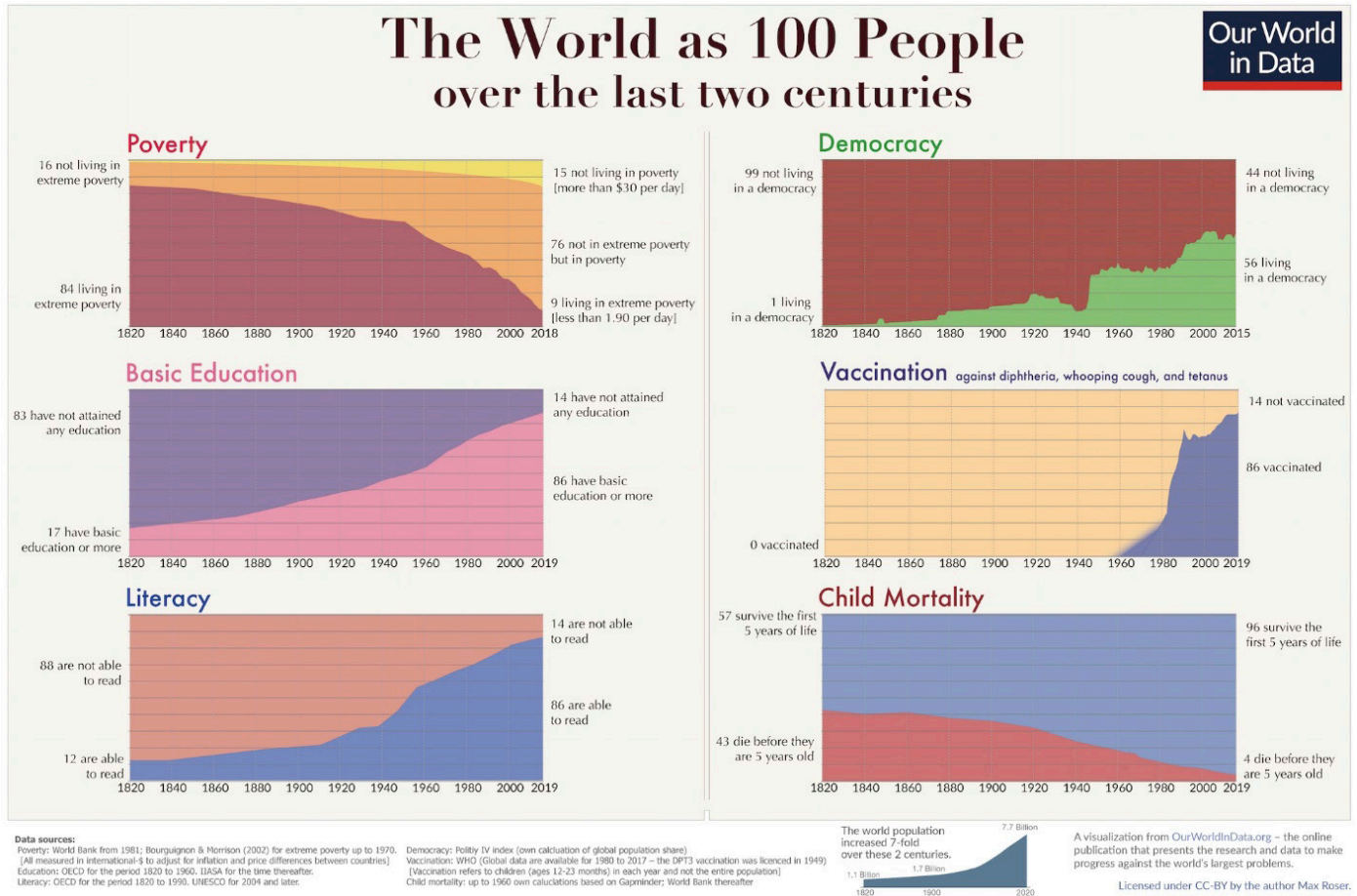
## **OUR OPPORTUNITIES ARE VAST TOO**

So far I've only spoken about the risks that we face. But our large future means that there are large opportunities too. Problems are solvable. This is for me the most important insight that I learned from writing *Our World in Data* over the last decade.

Compared to the vast future ahead, the two centuries shown in this next chart are only a brief episode of human history. But even in such a short period, we have made substantial progress against many large problems.

Given enough time we can end the horrors of today. Poverty is not inevitable; we can achieve a future where people are not suffering from scarcity. Diseases that are incurable today might be curable in just a few generations; we already have an amazing track record in improving people's health. And we can achieve a world in which we stop damaging the environment and achieve a future in which the world's wildlife flourishes.

Our children and grandchildren can continue the progress we are making, and they may create art and build a society more beautiful than we can even imagine.



The point of this text was to see that the future is big. If we keep each other safe, the huge majority of humans who will ever live will live in the future.

And this requires us to be more careful and considerate than we currently are. Just as we look back on the heroes who achieved what we enjoy today, those who come after us will remember what we did for them. We will be the ancestors of a very large number of people. Let's make sure we are good ancestors.

For this, we need to take the risks we are facing more seriously. The risks we are already facing are high. Giving this reality the attention it deserves is the first step, and only very few have taken it. The next step will be to identify what we can do to reduce these risks and then set about doing that.

Let's also see the opportunity that we have. Those who came before us left us a much better world; we can do the same for the many who come after us.

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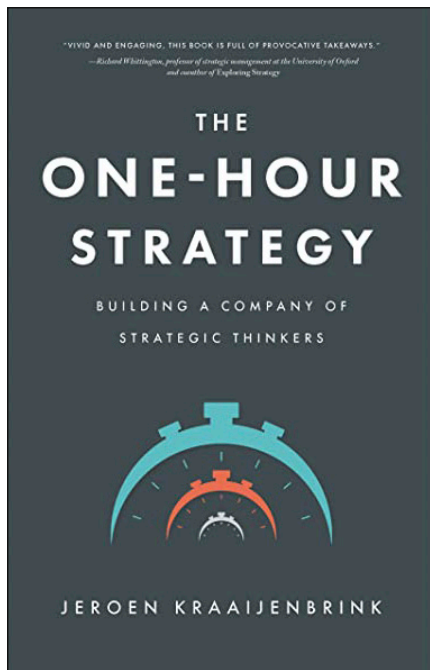
Dr. Max Roser  
<https://www.maxroser.com/>

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## The One Hour Strategy

by Jeroen Kraaijenbrink



# Book Review

by Charles Brass – Chair, Futures Foundation

Perhaps the most often repeated concern among strategic foresight practitioners is the extent to which their clients fail to follow through with implementing the work they have done during foresight and strategy sessions.

Various suggestions are commonly made to address this issue – from having a strategic foresight practitioner embedded within the client organisation through training a cohort of internal change agents in foresight practice to engaging consultants on rolling retainers to ensure that what is decided is actually implemented.

One less common – but more difficult to implement – suggestion, is to embed strategic foresight throughout the organisation. This book by a Dutch management consultant is a (fictional) attempt to describe how this might be done. Kraaijenbrink doesn't claim to be a futurist – he teaches strategy at the University of Amsterdam – but he has written a concise and credible account of how strategic thinking might be successfully embedded within an organisation – and what the consequences and results of such an initiative might look like.

In under 100 pages the book follows the journey of a new employee joining a mid-sized global industrial company who ten years ago implemented a program called the One-Hour strategy. In this (fictional) organisation the Executive Team spend one hour a day on strategy, the middle management one hour a week and all other employees one hour a month. Much of the book explores how this operates in practice.

The final chapter is titled: “What the one-hour strategy means for you” and includes this quote:

“I am going to guess that you are quite surprised about what you read and that you haven't worked for any organization doing strategy in this way. And maybe you even feel that the One-Hour Strategy approach doesn't look very *strategic* in the first place. You would be entirely right, because that's the point. Done well, strategy is not something mystical reserved for the top of the organization. Strategy is for everyone and must come from everyone. It is a down-to-earth business process that belongs to everyone's day-to-day job.”

Kraaijenbrink doesn't claim his approach to be “a strict set of rules to follow; nor is it the ultimate final version of how strategy should be done. It's a beginning, a source of inspiration, a seed for doing things differently” (p104). Instead he suggests: “embracing the One-Hour strategy requires a substantial shift in people's mindset. This takes time and persistence” (p106). To help this he has created a website – [www.theonehourstrategy.com](http://www.theonehourstrategy.com), and at the very end of the book he summarizes the 18 key takeaways his protagonist has recorded during the first month of his employment with the company.

For anyone who has ever felt dissatisfied by how their strategic efforts have been actually implemented, this book provides both entertaining reading and some well thought through insights about how strategic planning work might be done more effectively.

# FUTURISTS IN ACTION

## THE HEART OF FORESIGHT HOW FUTURES THINKING CAN FOSTER A HUMAN REVOLUTION

by Frank Spencer and Ashley Bowers



### Care, empathy, reconciliation, and love.

These probably aren't the first expressions that would come to mind if you were asked to describe the field of foresight and futures thinking. Nonetheless, many people have acknowledged feeling a deeply internal, psychological and almost metaphysical impact when they have their first encounter with thinking about the future in a more substantial, purposeful and structured fashion. Not everyone reacts to futures thinking in such an exuberant manner. Nonetheless, this visceral response is so widespread and numerous that it begs the question: Why does foresight have such a powerful effect on its users?

Of course, foresight has traditionally been used to inform strategy, inspire innovation, activate change and direct actions. Further, social entrepreneurs have leveraged futures thinking to imagine alternative possibilities as solutions to big world problems. Beyond these tactical uses, is it also possible that foresight, by its very nature, contains an even deeper and more meaningful directive?

A famous axiom in the futures thinking realm goes something like this: The way that we think about the future directly impacts the actions that we take today. This is true whether you are an active participant in thinking about future possibilities or a passive observer in how the future continually unfolds. Either way, your present-day actions are a reflection of your mental image of the future — how you believe it should manifest, as well as what you're able to imagine. For this reason, we have an ethical obligation to supercharge our futures thinking abilities in our lives, our businesses, our governments and our societies, aligning our actions with more equitable and regenerative landscapes for humanity and the planet.

When we only think about our very next steps — what we will do today in order to maintain successful outcomes — we become trapped in the prevailing or dominant narratives that define every element of our lives: the cultural barriers we face, the social structures we inhabit, the technologies





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that dictate our choices, the means of production that define human existence, and the endless consumption that exhausts our planetary carrying capacity. Actively employing foresight in a structured, inclusive and inquisitive fashion allows us to break free from these dominant narratives, both internally and externally. Think about how moving and touching such an experience can feel; being liberated from the narratives that play on an endless loop of demoralizing banality — maybe for the first time since being a child — can be very emotional indeed. And this is where foresight and futures thinking transcends its use as solely a methodology for strategic planning processes or governmental decision-making. When we realize the true landscape of change that's necessary for assuring better tomorrows — the human heart — then we come to understand the impact that foresight has on elevating our individual and collective care, empathy and love for the state of those around us, for the health of our world, and for the generations yet to come. In this sense, futures thinking is a technology of reconciliation, or the restoration of our relationship with all of life. That's pretty profound stuff!

As individuals and groups encounter foresight and futures thinking, they potentially begin a journey of “layered-imagining” in which they continually explore a plethora of alternative ideas and worlds. They may not realize it at first, but this ever-expanding journey through the looking glass activates a reframing of life as we've always known it at multiple levels of thinking, knowing and doing.

**Cosmological Consciousness:** Foresight and Futures Thinking directs us toward an evolutionary “futures consciousness” with the power to create new cognitive imaginariums, new spaces of inclusive perception and new realms to inhabit, both ideationally and experientially. As scientist and regenerative medicine expert Robert Lanza, famous for the theory of biocentrism, has argued,

*“Consciousness is the driving force for the existence of the universe... the physical world that we perceive is not something that's separate from us but rather created by our minds as we observe it. According to his biocentric view, space and time are a byproduct of the ‘whirl of information’ in our head that is weaved together by our mind into a coherent experience. His new paper, co-authored by Dmitriy Podolskiy and Andrei Barvinsky, theorists in quantum gravity and quantum cosmology, shows how observers influence the structure of our reality. According to Lanza and his colleagues, observers can dramatically affect ‘the behavior of observable quantities’ both at microscopic and massive spatiotemporal scales. (This is) a ‘profound shift in our ordinary everyday worldview... the world is not something that is formed outside of us, simply existing on its own. Observers ultimately define the structure of physical reality itself.’”*

As intentional futures thinking empowers us to explore transrational mindsets and simultaneous multiples, we both envision and create novel realities that can solve our greatest challenges and manifest our wildest dreams.

**Regenerative Design:** When futures thinking elevates our consciousness beyond our everyday assumptions, biases and confines, we examine more than alternative pathways within existing systems; we begin to imagine entirely different societal constructs and structures. As author Daniel Christian Wahl has noted,



**Ashley Bowers** leverages her expertise in sustainable design, environmental science and regenerative agriculture to illuminate how foresight champions a holistic approach that empowers organizations, institutions and governments to thrive in a world of exponential uncertainty and complexity. Holding a Masters of Science in Agricultural, Environmental and Sustainability Science from the University of Texas and a Bachelor of Science in Sustainability in the Built Environment from the University of Florida, she is passionate about fostering a spirit of learning, unlearning and relearning among clients and alumni; challenging individuals and groups to dive deep into emerging landscapes of change; and democratizing multi-faceted visions of the future. When Ashley isn't developing trend research, future-oriented maps or robust scenarios, you will find her expanding the TFS knowledge base through the creation of new content, curriculum and capabilities.

*"Faced with multiple converging crises — all of them rooted in what Gregory Bateson and Fritjof Capra first called a crisis of perception — humanity is challenged to redesign the human presence on Earth. We need to transform our current degenerative and exploitative impact into a regenerative impact on communities, ecosystems, regional economies and the biosphere as a living and constantly transforming whole."*

Foresight can launch us past the systemic wicked problems that constrain our thinking and actions, and open up whole new ways of designing the world around us that make symbiotic wellness between human and planet a reality. As Kiss The Ground's Karen Rodriguez says when talking about applying regenerative design to ecological health,

*"Regenerative agriculture is about more than just stewarding the land; it's about equity, culture, tradition, mindfulness, and a healthier humanity."*

Author and visionary Jean Russell takes us even further:

*"Thrivability builds on itself. It is a cycle of actions which reinvest energy for future use and stretch resources further. It transcends sustainability by creating an upward spiral of greater possibilities and increasing energy. Each cycle builds the foundation for new things to be accomplished."*

This way of thinking places care, empathy, reconciliation and love at the center of generational development and long-term vision.

**Human Potentiality:** Not only does foresight unlock the possibilities and opportunities around large-scale systems, but it also impacts the potentialities within humans, both as individuals and in community. According to writer and scholar Richard Slaughter,

*"Foresight is an attribute or a competence that pushes the boundaries of perception in at least four major ways:*

- by assessing the implications of present actions, decisions, etc;
- by detecting and avoiding problems before they occur;
- by considering present implications of possible future events; and
- by envisioning aspects of desired futures.

*When used in this context, images of the future are essentially the manifestation of our expectation that transformation is possible. Creating a vision, be it as an individual or organization, taps into the deepest desires of the people involved and allows them to express how they wish the world to be... The fear and anxiety held about the future by individuals is mitigated through development of futures images, whether they come true or not, and they allow clear decisions to be taken in the present which otherwise may seem fraught with difficulties — the future is a playground in which the boundaries of the present loosen and creativity abounds."*

Our modern expressions of work, education and social connection not only drain us of purpose and passion, but they increasingly strip us of a sense of influence or meaning. Foresight fosters a deep well of transformative sense-making that echoes the interplay of envisioned pathways, anticipatory agency and goal-oriented behavior.

Through an activation of multi-layered consciousness, regenerative design, and personal or group potential, it's easier to understand why futures thinking is a technology of care, empathy and love — not only for the world around us, but for the world(s) yet to come.

# Signals in the Noise

## 10 REALISTIC PREDICTIONS FOR THE NEXT 30 YEARS THAT WILL CHANGE HOW WE LIVE

by Ayush Jalan



Every generation dreams of what life will be like for the next one, and our predictions as humans have historically been horribly wrong, for better and worse. While progress is being made at unprecedented levels, history has taught us that it's wiser to remain humble yet imaginative. Knowing that, let's discuss the 10 most realistic predictions for the next 30 years that can change our lives forever

### 1. Nobody Will Drive Cars Anymore

Self-driving cars are not the future, they are already here and they work. And with time, they'll get smarter, more affordable, and more accessible. Unlike human drivers, a self-driving car never fatigues, never drinks and drives, never feels sleepy, and has faster reaction times. This will allow for much better traffic coordination and minimize traffic jams and accidents. Self-driving cars aren't perfect, granted, but they don't need to be. They just need to be better than most human drivers which is not that hard of a goal to achieve.

### 2. White-Collar Workers Will Become Digital Nomads

The COVID-19 pandemic showed us that remote work is not only possible but inevitable. By 2050, the world will be so connected that even having a home office won't be necessary, let alone an office building. White-collar workers will be able to become true digital nomads and will have the ability to work anytime, anywhere. The 9-to-5 workday will die once and for all.



### 3. Blue-Collar Jobs Will Become More Lucrative Than Ever

Although AI can't fully replace humans at work, it is making some white-collar jobs less relevant. But since blue-collar jobs like farmer, plumber, electrician, technician, and construction worker require manual labor, they will become far more lucrative than ever before in history—perhaps even more than some white-collar jobs. Some pink-collar jobs can be also automated such as waiter, but other jobs like secretary, receptionist, therapist, or babysitter require human connection, interpersonal skills, and high emotional intelligence. Hence, they are likely to remain safe in the future.



## Signals in the Noise

### 10 REALISTIC PREDICTIONS FOR THE NEXT 30 YEARS THAT WILL CHANGE HOW WE LIVE

#### 4. Breakthrough in Battery Tech Will Kickstart the Next Era of Wearables

Pretty much all modern electronics, from smartphones to electric cars, run on lithium-ion batteries. And the tech has gotten us quite far since its discovery in the 1970s. But today, lithium-ion batteries are not able to keep up with the speed of tech anymore. Fortunately, several alternative battery technologies are already in the works, so it's fair to predict that we'll see a major breakthrough within the next decade. Since battery life will no longer be a problem, it will supercharge the innovation, production, and adoption of wearable gadgets like smart glasses, watches, rings, shoes, and more. We may also see novel gadgets like anti-anxiety headbands that reduce stress, speed-sleep earmuffs that help you fall asleep faster, or similar. These gadgets will be more focused on improving quality of life rather than enhancing productivity or entertainment.



#### 5. VR Experiences Will Become Our Favorite Pastime

The metaverse may not happen as planned, but it's very likely that virtual reality will become a big part of our lives in the next few decades. In the same way that we pay for amusement parks today, we will pay to rent VR "experiences" in the future. These experiences may include floating in outer space or the deep sea, walking on Mars, roaming fictional worlds like Hogwarts and Narnia, and many more. To capitalize on this future, VR artists will become a very common job, and some enthusiasts and gamers will go so far as to buy haptic bodysuits to take their experience to the next level.

#### 6. Traditional Smartphone Form Factor Will Go Extinct

Contrary to what some say, we don't think smartphones will go extinct and be fully replaced by AR glasses. Instead, what's perhaps more likely is that the traditional smartphone form factor

(aka "phablet") will go extinct but newer, flexible form factors will become mainstream like foldable or rollable phones with bigger screens. Simple tasks that we do on our phones today like calling, messaging, and checking emails will indeed be done on wearables. But more immersive tasks like gaming, working, and video calling will probably be done on flexible smartphones which will be much thinner, lighter, and more pocketable due to the new battery tech.



#### 7. AI Will Make Full-Length Movies

AI tools today have already started making short video clips using text prompts. And within a decade, it'll become capable enough to produce full-length movies using screenplays as prompts. Of course, you'll still need to do some manual editing, but the process will become so fast that creating a movie may only take a few weeks time at max. We also envision actors commoditizing the use of their faces and voice, and licensing them to film studios to apply on top of stunt doubles via deepfake and voice cloning technology. That way, famous actors won't really have to perform and can just capitalize on their identity itself. Weirdly enough, this technology may also be used to make dead actors "come back to life" and continue starring in a movie or TV series virtually forever. But this capability will spark some serious moral and ethical concerns and fuel controversy. And lastly, people will also use AI to make modifications to the parts of a movie they don't like. Yes, really.

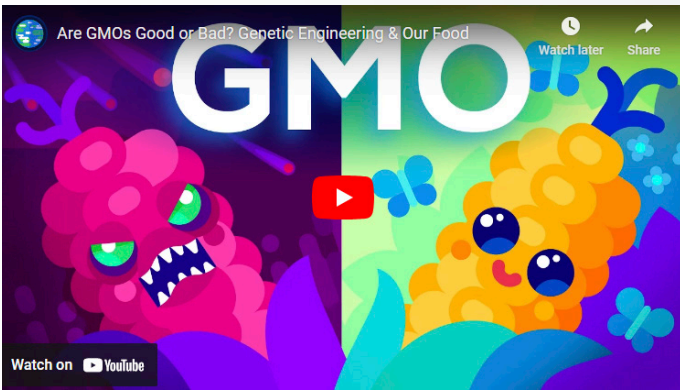
#### 8. Movie Theaters Will Go Extinct

Although there's nothing quite like sitting in a physical movie theater alongside real people, we think cinemas will go extinct very quickly. Why? Because it's simply more convenient to watch movies at home. And if you want that in-person cinema experience, VR artists will be more than happy to design a virtual movie theater for you and your friends.



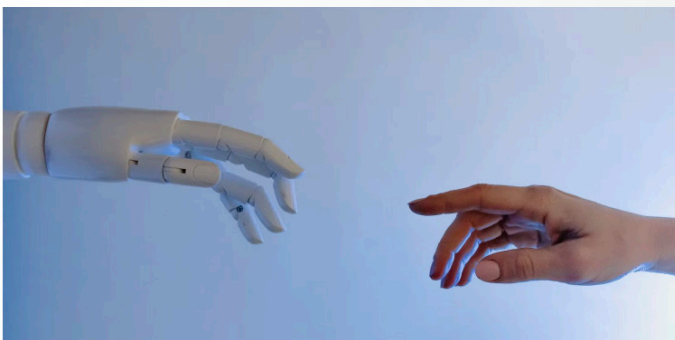
## Signals in the Noise

### 10 REALISTIC PREDICTIONS FOR THE NEXT 30 YEARS THAT WILL CHANGE HOW WE LIVE



#### 9. GMOs and AI Will Help Supercharge the Food Industry

By 2050, the global human population is projected to reach nearly 10 billion, and this is a big problem because we already have hundreds of millions of people suffering from hunger. An effective way we can feed billions of people in the next decades is through the use of Genetically Modified Organisms (GMO) crops and the deep integration of AI into the farming industry. Humans have selectively bred plants and animals for thousands of years for better yield, and using GMO crops (simply put) is like fast-forwarding that process to get more food out of limited land. GMO crops will grow faster and bigger, and increase our food's shelf life. AI will also help make farming more efficient, reduce wastage, use less water, and strengthen global supply chains. It's also likely that lab-grown cultured meat will replace (and be indistinguishable from) meat harvested from animals; this will help greatly reduce our emissions and slow down climate change.



#### 10. We Will Witness the Inception of Artificial General Intelligence

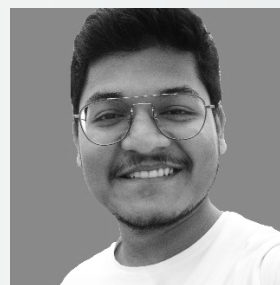
The AI we have today is called ANI (artificial narrow intelligence), and although capable, it's limited to performing very specific tasks and can't match the intelligence of an adult human in multiple aspects. But since AI is growing exponentially, we may soon

get to a point where "artificial general intelligence" or AGI is no longer just a prediction.

"Developing AI and AGI has been the great dream of the computing industry. For decades, the question was when computers would be better than humans at something other than making calculations," Bill Gates writes. "Now, with the arrival of machine learning and large amounts of computing power, sophisticated AIs are a reality and they will get better very fast." With ANI, the biggest threat to society seems to be unemployment, but when we think about AGI, the dangers (and benefits) start creeping into the science-fiction territory. We could try preparing for it as much as we want, but it's impossible to predict how AGI will change our society.

#### The World Will Never Be the Same

Human beings are linear thinkers, so it's no surprise that the exponential growth of technology can be so difficult to comprehend. Concepts like self-driving cars, digital nomadism, wearable technology, and virtual reality were science fiction 20 years ago. But today, they are not only real but also being adopted by an increasing number of people. Will man have set foot on Mars by 2050? Will there be the world's first trillionaire? Who knows! What we do know for sure is that, despite the challenges, there's a lot to look forward to and mankind will continue to accomplish feats previously thought impossible.



**Ayush Jalan** is a senior writer at MUO and holds a bachelor's degree in business administration. He has been writing professionally since 2018 and his work at MUO has been viewed over 4 million times. He specializes in

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