

Rationality: how to inspire a balanced reflection?



Steven Pinker

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Abstract: The main topics covered in this lecture concern some insights about his latest book and also about some powerful tools of reasoning, logic, critical thinking, probability, correlation and causality. Steven Pinker invites us to take advantage of the power of rationality, aiming to make better choices in our lives, to improve social justice and moral progress.

Keywords: rationality, logical reasoning, critical thinking, fake news, game theory



DIOGO: Good afternoon, folks! We live in an era in which there are so many innovative scientific and technological advances. Yet, why does rational thinking seem to be so lacking? At the same time, we managed to develop the COVID vaccine in 48 hours (the Moderna vaccine was developed in 48 hours, without the direct access to the virus, using only a digital file). But the humanity still faces so much difficulty in knowing how to converse and in being able to combine public discourse and freedom of expression with common sense and civility.



BRUNA: In the closure of this Innovation Week 2021, we will welcome Steven Pinker to share with us some insights of his latest book. We will talk about the powerful tools of rationality, logic, critical thinking, probability, correlation and causality.



DIOGO: Steven Pinker is a best-seller author and a Psychology Professor at Harvard University. His research is focused on language, cognition, social relations, rationality and human nature. Steven Pinker has been one of the most rational voices in public debates, encouraging healthy spaces for constructive discussions.



BRUNA: His most recent book is named “Rationality: What It Is, Why It Seems Scarce, Why It Matters”. Thus, Pinker is closing this week’s program explaining why we think in ways that make sense in our daily lives, but yet we do not use the powerful rationality tools, which our best thinkers discovered over the millennia. Welcome Steven Pinker.



STEVEN: Thank you so much. I think to talk about my new book, “Rationality: What it is, Why it Seems Scarce, Why It Matters”, I should start by talking about human rationality. Thus, human rationality presents us with a puzzle. On the one hand, we are a highly rational species. We have discovered the origins of the universe. We have walked on the moon. We have uncovered the basis of life and mind. We have fought back against the horsemen of the apocalypse, scourges like war, whose death rate we have reduced.

We had also reduced famine, poverty and early death. However, at the same time, a majority of Americans, aged 18 to 24, think that astrology is “very” or “sort of scientific”. Besides that, large proportions believe in conspiracy theories, such as that COVID vaccines contain microchips that Bill Gates is trying to inject into our bodies to monitor us. Or even that the American deep State contains a cabal of cannibalistic, Satan worshipping pedophiles, that Donald Trump will soon reveal. Moreover, people consume fake news, like “Obama signs Executive order banning the pledge of allegiance in schools nationwide”. Or yet, this other one in which Yoko Ono said, “I had an affair with Hillary Clinton in the 1970s”. In addition to that, many people believe in paranormal “woo-woo”, including possession by the devil (42%), extra sensory perception (41%), ghosts and spirits (32%), witches (21%) and spiritual energy in mountains, trees and crystals (26%).

With this in mind, how do we account for both the presence of rationality in the human species and the fact that it appears to be so scarce? That is what I try to take up in the book. In this sense, if people can be rational, why does humanity seem to be losing its mind? Thus, there is not a simple explanation. So, I have adduced four distinct reasons. The first you can call “Motivated Reasoning”. Namely, rationality is always in service of a goal. That goal is not necessarily objective truth.

Hence, “Motivated Reasoning” consists not in following logic wherever it takes you, but in deciding what conclusion you believe is true, and then manipulating your reasoning so it ends up where you want it to be. Besides that, rationality can be deployed too, just because you want to win an argument in which the stakes matter to you. As the American journalist Upton Sinclair said: “It is difficult to get a man to understand something, when his livelihood depends on not understanding it”. Moreover, if the goal may be to prove how wise and moral your group is, namely, your religion, your tribe, your political sect, and how stupid and evil the opposing one is. Which is sometimes called “My side bias”.

And also of all the many cognitive biases and fallacies that psychologists have discovered which I discuss in the book “Rationality”, the “My side bias” is maybe the most powerful.

Therefore, I will give you an example. This is a logical Syllogism. If college admissions are fair, then affirmative action laws are no longer necessary. In other words, affirmative action laws are those ones that give preference to racial minorities and women. On the other hand, college admissions are not fair. Therefore, affirmative action laws are necessary. Since valid syllogisms are the ones in which the conclusions follow from the premises, is that a valid Syllogism? Well, the answer is, no. This would be the fallacy of “denying the antecedent”. Namely, “P implies Q”, “Q therefore, P”. That is not logical.

Nonetheless, the majority of people on the political left, liberals, commit the fallacy that conservatives do not. Now, what a conservative would say: “Well, it proves what we knew all along. Namely, the left is irrational”. Well, not so fast. Because let me try out this other Syllogism. If less severe punishments deter people from committing crimes, capital punishment should not be used. On the other hand, less severe punishments do not deter people from committing crimes. Therefore, capital punishment should be used. Well, this too involves the fallacy of affirming the consequent. Now this time conservatives commit the fallacy and liberals do not. Basically, both sides will twist logic to end up with the conclusion that they believe was true in the first place.

Furthermore, a second explanation for widespread human irrationality is primitive intuitions that we all share. Perhaps a result of our evolution in a natural environment. For example, we are all dualists.

We believe that people have minds that are separate from their bodies. Thus, when you interact with a person, you do not treat them like a robot or a doll. You input a mind to them. You assume that inside them, there is a set of beliefs and desires that, although you cannot see or hear, animate their behavior. Hence, that is the locus of their consciousness. From there, it is a short step to imagine that minds can exist separately from bodies. As a consequence, you have beliefs in spirits, souls, ghosts, in afterlife, reincarnation and ESP (Extrasensory Perception). Besides that, we also have the intuition of “Essentialism”, that living things contain an invisible essence, stuff or power, which gives them form and powers.

Then disease comes when there is some contaminant, pollutant or adulterant that has been introduced into the body. Thus, that intuition is a short step to rejecting vaccines. Because after all, vaccines involve taking a piece of a disease agent or germ, and actually injecting it into your body. That is also why people reject genetically modified organisms, which have repeatedly been shown to be perfectly safe, but people perceive it as some kind of pollutant and also other food additives.

Besides that, it also explains why people are susceptible to medical quackery, like homeopathy, herbal remedies. And why, in many cultures, disease is treated by purging, by bloodletting, fasting and this vague notion of getting rid of “toxins”.

Another primitive intuition is “Teleology”. As we know, our plans and artifacts are designed with a purpose. They are designed with some future goal in mind. Often, that is a short step to assume that the universe has a purpose and to believe in creationism, in astrology, in synchronicity and the vague sense that everything happens for a reason.

Moreover, we have intuitions of collective self-defense, that we are vulnerable to raids and ambushes by enemies plotting in secret. And in our evolutionary past, that was the way in which tribal people were most vulnerable to attack. And then from there, it is easy to move to the lack of evidence for this conspiracy as proof of what a diabolical conspiracy it is.

Accordingly, these primitive intuitions are unlearned and objective scientific truths are acquired, only by trusting legitimate expertise, scientists, historians, journalists and government agents. However, just a few of us can really justify our beliefs, including true ones. There are very few of us that, for example, know enough atmospheric chemistry to really explain what causes climate change. But we trust that the people in the white coats, who have done the calculations, have the true story. On the other hand, experiments and surveys have shown that “Creationists” and “Climate deniers” are no less scientifically literate than believers. They just differ in their political ideology. Hence, the farther you are to the right, the more you deny climate change. In fact, people who believe in climate change often have an iffy basis for their belief. Maybe people think that it has something to do with the ozone hole or toxic waste dumps or plastic straws in the ocean. It is not that they understand science. But it is rather that they trust the scientists.

Furthermore, weird beliefs persist for people who do not trust the establishment. They think that scientists or journalists or government officials are just one more priesthood or tribe. Thus, they have no greater cling to the truth than some guy on the internet with a website. And that especially happens when the establishment flaunts its own partisan politics. For instance, when scientists and journalists basically advertise they're part of the political left, then, the political right will naturally take the opposite point of view. Finally, there is a distinction between what I call, "Realist beliefs" and "Mythological beliefs".

Therefore, Bertrand Russell once said: "It is undesirable to believe a proposition when there is no ground whatsoever for supposing it is true". Hence, if that strikes you as an obvious trait, banal, of course... Then, you have an unusual post-enlightenment view of belief. In fact, what Russell said was a radical unnatural manifesto. That is not the way the human mind actually works. In this sense, people hold two kinds of beliefs. On the one hand, their beliefs are what I call the "Reality zone".

So, the physical objects around us, the other people that we deal with face-to-face, our memory of their interactions, the rules and norms that are applied to their everyday life. Thus, in this Zone, beliefs are thought to be testable and they are held if they are true. And in this Zone, people are perfectly rational. Even people who believe crazy conspiracy theories are enough in touch with reality, they hold a job, they pay taxes, they get their kids clothed and fed and off to school in time, they keep food in the refrigerator and a roof over their heads.

However, beliefs in what I call the “Mythology zone” are very different. When it comes to what happened in the distant past, billions of years ago. The unknowable future, faraway peoples and places, remote corners of power, like corporate boardrooms or presidential palaces, or parliamentary committee rooms, the microscopic, the cosmic, the counterfactual, the metaphysical. In other words, in all of these more abstract domains, people hold beliefs, not because they are true or false. It is not possible to know. But because they are entertaining, uplifting, empowering and morally edifying. Whether they are true or false, it is kind of unknowable and irrelevant. For example, a lot of religious beliefs.

For instance, people who believe in God, they do not say that they can actually see him or hear him or prove that he exists. But rather they just think it is important that you believe in him. Besides that, national myths, the heroes and martyrs and the gods that founded a nation that historians often tell us were not nearly as noble as they are portrayed in national myths. And also, historical fiction, like the plays of Shakespeare. Thus, do we really care whether Henry the fifth delivered that speech at the battle of Agincourt? Finally, conspiracy theories.

For instance, many people who claim to believe that, let's say Hillary Clinton ran a child sex ring out of a pizzeria in Washington, DC. Despite that, they do not do the obvious thing, like call the police. Which is what you would do, if you really thought that children were being raped in the basement. Instead, they did things like, they left a one-star review on Google, of the restaurant. Now, for people like that, saying that Hillary Clinton ran a child sex ring, it is basically a way of saying: “Bu-hu, Hillary!” In other words, it is like saying that she is so evil and depraved, so that is the kind of thing which she could do. Whether she did it or not. Well, no one really knows.

Therefore, it raises the question “How can we become more rational?”. Hence, I suggest that the tools of formal rationality, the ways of reasoning soundly, like logic, probability and game theory, should become second nature. First of all, rationality should be the “fourth R”¹, behind reading, writing, and arithmetic, and should be taught in schools. Second, norms of rationality should be promoted. We should be aware of fallacies like, the “My side bias”, or arguing *ad hominem*, which means attacking the person rather than the position. Besides that, the “Availability bias”, which means reasoning from anecdotes that are available in memory instead of the best data. Therefore, it should be considered embarrassing, mortifying (*faux pas*) to conduct one of these fallacies.

¹A reference to an educational program, which included a fourth principle, besides reading, writing, and arithmetic, namely “Relationships”.

Thus, we should treat our beliefs as hypotheses to be tested, not treasures to be guarded, and change our minds when the evidence changes. That should be a general norm or expectation. But perhaps the most important is “institutions” that must be safeguarded. It means groups of people who agree to certain rules that favor the truth and allow us, collectively, to be more rational than any of us individually. Moreover, in a group, they can compare their findings, criticize each other’s positions, and one person can notice another person’s biases.

So, for example, in tests of logic, often a test will not be so intuitive that only 1 in 10 people get it right. But if you put people in groups of 4 or 5 to work together to get the correct answer, then 7 in 10 will get it right. Even though all of us are biased, we are pretty good at noticing other people’s biases. Accordingly, that can work, if you have a group of people following rules to get to the truth.

Furthermore, what do I mean by “rationality promoting the institutions”? Well, there is science, when there is empirical testing and peer review. And also, democratic government, in which there are checks and balances. So, the president can do anything he wants, but can be opposed by the courts and the parliament.

Besides that, there is journalism, with its requirement for editing and fact checking. Moreover, the judicial system, with the adversarial proceedings of opposing lawyers. In addition, there is academia, with freedom of inquiry and open debates, where any idea can be criticized. And even Wikipedia, which is surprisingly accurate, and whose editors have to commit themselves to neutrality and objectivity. Hence, compare that to Twitter or Facebook (social media), where you get credit not for objectivity, but for fame, notoriety and entertainment value.

And also, where opinions can easily be shared rather than evaluated. Besides that, it is very quick, any idea that you have could instantly be propagated. As opposed to responsible journalism and academia, where you sift, filter and try to find the one good idea from the dozens of bad ones.

Thus, why does rationality matter? Well, rationality matters to our lives. A number of studies show that people who follow the models of rationality, avoiding cognitive biases and fallacies, on average, get into fewer accidents and mishaps. In addition, they have better financial health and employment outcomes. Therefore, rationality drives material progress.

In my previous book “Enlightenment Now: The Case for Reason, Science, Humanism, and Progress”, I argue that progress is a real phenomenon. Hence, if you plot over time, longevity, peace, prosperity, safety and quality of life, they have all improved. Consequently, this leads to a question, “Does that mean that you believe in progress?”. Well, the answer is, no. As an American comedian said: “I don’t believe in anything you have to believe in”. Thus, progress comes from deploying reasons to improve human flourishing.

In other words, people see a problem, then they try to figure out how to solve it. Sometimes, they succeed and keep the solutions that work. We try not to repeat our mistakes. So, that is the only reason that progress ever happens.

Less obviously, I believe that rationality drives moral progress and social justice. Hence, in another book “The Better Angels of Our Nature: Why Violence Has Declined”, I applauded many declines of violence and oppression. For instance, the decline of war, of torture, of genocide and of autocracy. In this sense, I found that many of those movements began with a rational argument.

Namely, some philosopher, thinker or activist made an argument claiming that some practice which people were doing is incompatible with other values they claim to hold. Thus, the arguments would be reprinted in pamphlets and books. As we say, “they would go viral”. Then, they would be discussed in coffee houses, saloons and pubs. Consequently, it would influence the elites, and eventually become the law of the land. This includes religious persecution, cruel punishments, war, autocracy and even slavery. Finally, I argue at the end of the book that the power of rationality to guide moral progress is of peace, with its power to guide material progress and wise choices in our lives.

Moreover, our ability to make increments of wellbeing out of a pitiless world and to be good to others despite our flawed nature depends on grasping impartial principles that transcend our parochial experience. We are a species that have been endowed with an elementary faculty of reason, and that has discovered formulas and institutions which magnified its scope. Thus, they awaken us to ideas and expose us to realities that confound our intuitions that are true for all that. Thank you!



DIOGO: Thank you very much, Professor Pinker! We have a few questions from the audience. I will begin with: “Which political system do you think is more conducive to rationality in politics?” and “Which one better prevents irrational wackos, as they say, from rising to power?”



STEVEN: Well, clearly a liberal democracy is the most rational political system. Because it has these mechanisms of feedback and error correction. If you have an autocrat, a strong leader, he is just a human being, he is just a guy. And, no one is infallible. No one is perfect. No one knows everything. Inevitably, someone in power will do something stupid. Moreover, people in power like to accumulate more power.

On the other hand, in a democracy, if there is a mistake in a policy, then people can criticize it, journalists can criticize it, people can protest it. And, in the government itself, there are checks and balances, as I mentioned. This means that the leader can do anything he wants, but he has got to have the cooperation of the legislature and the court system. Accordingly, all of these checks and balances are, like in science, the demand for peer review and empirical testing. In other words, the ways that any idea is corrected by feedback from the world.

However, in a system of government that suppresses free speech, that gives power to a strong leader. Then, there is a guarantee that they will do stupid and perhaps evil things.



DIOGO: Then, “Is that the liberal democracy, which you find more rational?”



STEVEN: Indeed, liberal democracy is more rational.



DIOGO: “Is there an electoral system, proportional representation, majoritarian, which you find more rational?”



STEVEN: Oh yes! Democracies have a variety of mechanisms. And some of them are definitely more rational than others. For instance, the American system is probably the least rational. Both because there is an electoral college and virtually no one could defend the electoral college. But even without the electoral college, even if it was just by popular vote. Since any system that is, as they say, “First past the post” - namely, whoever gets the most votes wins - it will be less rational, in the sense that it will fail to satisfy the preferences of a majority of voters whenever there is a third-party candidate. I should not say whenever, but, instead, very often.

In this sense, among the different voting systems, for instance, a runoff, or ranked choice, we know that each one of them has different flaws. There is no such thing as a voting system that satisfies all the criteria for what you would want a voting system to do. But some of them are better than others. And the plurality wins, as we know it is one of the worst.



BRUNA: Excellent, Professor Pinker! First, I have to say that we have more than 6,000 people watching us right now in Brazil. I am sure they are looking forward to your book being translated into Portuguese.



STEVEN: Yes, it will be.



BRUNA: It is important to say that our questions are voted by our audience. So, we will start with one that was the most voted. Hence, “Given that social media businesses are driven by engagement and emotion, how to encourage rationality in this environment?”



STEVEN: It is an excellent question, because all of the mechanisms that allow certain institutions to promote rationality - like science, liberal democracy, the court system - are totally disabled in social media. It is almost the exact opposite, since we get instant proliferation without reflection, without filtering out the bad ideas and the good ones. Moreover, you get esteem or glory based on fame, notoriety and entertainment value, rather than on a reputation for accuracy. Besides that, it is not clear how the social media platforms - what changes in their algorithms or in their engagement mechanisms - would make it more rational. Whether it would be to slow things down, for instance, to have people accumulate a score based on how thoughtful, how accurate their posts have been.

Although there are ways of scoring posts for intellectual complexity, as opposed to just an insult value. I think that they are so new and the interactions are so complex that it would be very hard to know, beforehand, what would work and what would not. But we can put pressure on the companies to try out modifications that would make it less polarizing and divisive, and more thoughtful and deliberative. I do not know what they are.



DIOGO: Thank you, Professor Pinker! “How do you see the future of institutions of higher education, where the pursuit of objectivity and rationality can sometimes be seen as dangerous or aligned with other social goals?”



STEVEN: Well, I think that there is a problem in American higher education, where there is a narrowing of political viewpoints. There are fewer and fewer conservatives, almost everyone is liberal or leftist. And this means that students and professors are not exposed to criticism and alternative viewpoints.

Furthermore, there is a problem with the punishment of unorthodox opinions, where people can get fired or disciplined for questioning certain policies or certain ideas. As a consequence, these will disable or turn off the only mechanism that we have for approaching the truth, which is voicing ideas and allowing them to be criticized. If certain ideas cannot even be expressed, then we are guaranteed to be ignorant of certain answers. In this sense, there is a saying: “The more we disagree, the greater the chance that at least one of us will be right”.



BRUNA: Yes. We have one question here related to physics. Actually, I will start with another one, and then I will ask you about theoretical physics, which I found very interesting. Thus, “Do you believe that global warming is a matter of a normal cycle of our planet?”



STEVEN: I think the evidence is overwhelming, hence, it is not just part of the normal cycle of the planet. However, I think we would be better off posing this question to someone with expertise in climate and in geological history. But my understanding is that there is a huge or overwhelming consensus, and a good reason to believe that this is not part of a natural cycle. That it is way out of whack with the natural cycles. We have never had levels of carbon dioxide like this. We have never had a rate of warming like this. Definitely, we are seeing something that is historically unusual.



DIOGO: I want to ask you about one of the themes in your book, “Rationality”: “how dependent is that on social rationality?” So, Aristotle thought that individual morality depends on social morality. Hence, “Should individual rationality also depend on social rationality, or should we be more irrational in an irrational society?”



STEVEN: Well, it does not. In fact, when I spoke about the role of institutions like, science, liberal democracy, journalism and the court system, those are the kinds of social rationality. Namely, it is not just one person trying to be brilliant. It is a community of people, who can criticize each other and decide which ideas are likely to be true.

And also, which ones are probably false, so that you can combine ideas into more and more complex ideas. Thus, that is a kind of social rationality that I think is our only way of becoming collectively more rational. In this sense, it is never just one genius, because no human is free of biases and no one is smart enough to think everything up on their own.



BRUNA: So, “Where would untestable theories such as the Dark Matter, fall? Would they be Mythological beliefs? Should we consider them non-scientific?”



STEVEN: Well, probably a physicist will be better able to answer that question. But as far as I know, Dark Matter, the nature of Dark Matter, is not inherently untestable. Although it may be difficult to test in practice. Since, we do not have big enough or sensitive enough sensors. Therefore, it might have to be evaluated through different explanations, by parsimony, consistency with other things that we know in physics, and the reasoning to the best explanation. But I think that it would be different from mythology, where the only reason to believe it is entertainment value. Besides that, it is of moral value and valuable in bonding the tribe, for instance.

On the other hand, in physics, it may not be the case that everything is practically testable. Because we may not have a particle accelerator the size of Jupiter, or some other reason. That does not mean that the theory or the phenomena are logically untestable. It is just that, we may never be able to build the devices that we would need to test them or gather the observations necessary.



DIOGO: Let me ask you about the reconciliation of free speech and rationality in social media. “Should we have designs that make rationality more profitable?”



STEVEN: Yes. That is exactly what we should do if we can figure out what those are. Yes. I mean, one example of that would be prediction markets, where there will be some issue like an election, or exiting the European Union, or a rise and fall in Euro prices. And people actually bet against each other on what will happen.

So, when the event takes place or fails to take place, whoever has the best understanding of the world will make more money. Therefore, that is one example of making rationality profitable. Accordingly, there has been an argument that prediction markets are a lot more accurate than individual experts. So, by making that kind of accuracy profitable, we can incentivize more and more people to pull their expertise and therefore, come to more rational forecasts.



BRUNA: This question is also very good: “What ordinary actions or rules that are common today, will be regarded as irrational in a couple of centuries time?”



STEVEN: Well, it is hard to know. But it has often been suggested that factory farming and maybe more generally, eating meat, will be considered as barbaric and unacceptable as slave auctions and burning heretics are to us today. Besides that, it is also possible that just our slowness in switching from fossil fuels to alternative energy sources will be seen as highly irrational. I suspect avoiding nuclear power and shutting down nuclear power plants with the result that countries which do that and rely more on coal and oil might be seen as irrational. Plus, a lot of our science and technologies are bound to improve. And so, some of the beliefs that we have now, will be considered, if not irrational, certainly mistaken. Which are not necessarily the same thing. Moreover, nuclear weapons might be another example. Things that are militarily useless, but with the potential of catastrophic harm. Thus, it is possible that nuclear weapons will be considered to be just inexplicably irrational.



DIOGO: “What would be the most important belief about which you have changed your mind?”



STEVEN: Well, probably the belief that each of us, that we ourselves are infallible or perfectly rational. Everyone thinks that they are rational and everyone else is irrational. So, probably the most important belief is that other people will often have opinions that turn out to be correct when yours are not.



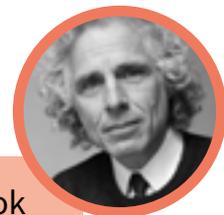
BRUNA: “Do you believe in minds as a subject? Or is it only a way to describe internal behaviors?”



STEVEN: Well, I sure do. I am a cognitive scientist and those are people who study the mind. In this sense, I spent my entire life committed to the idea that the mind is something that can be studied. So, absolutely, yes.



DIOGO: “Do you see your book as part of a series of books that have been dealing with an epistemological crisis?”. Thinking of Julia Galef’s “The Scout Mindset” or Jonathan Rauch’s “The Constitution of Knowledge”. Thus, “Do you think that this is a wave of books which are talking about the similar problems we are facing?”



STEVEN: Yes, I would say that my book is very much in the same spirit of those by Galef and Rauch.



BRUNA: So, “Irrationality in power is a lot more harmful than in the rest of society”. That is a statement. So, “How can governance improve that?” and “Do you think that we can build a better political system architecture to do so?”



STEVEN: Yes. I think that it is imperative to make governance more rational. I talk in the book about a number of ways. Even though everyone thinks the society is going crazy, and that rationality is going down, in many ways, there are movements which are making us more rational than ever.

For instance, in sports, there is Moneyball - you may have seen the movie with Brad Pitt - on the use of data and statistics to make decisions in sports, instead of just hunches and intuition. In philanthropy, there is effective altruism. You decide where your hours or your dollars will do the most good. There is evidence-based policing, how to use police force in the zones that have the most crime to reduce criminal violence the most. Moreover, there is evidence-based medicine that is evaluating medical practices for what actually works, with the use of randomized controlled trials.

You divide one group into the group that gets treatment, then, you have a placebo control group, and you compare them. And also, effective governance. Sometimes called Nudge, sometimes called Behavioural Insights, or just, Evidence-based governance. In general, the use of gathering of data, the processing of evidence to see which government policies actually do what they are designed to do. For instance, that engages people, makes them aware of government services, or steer them away from harmful behaviors. There is an organization that I consult with called Apolitical, which tries to share the information that we have between public servants in governments, all over the world.

Because together with the problem of not necessarily knowing which policies and programs work and which ones do not – often that knowledge may exist; however, it may be confined to one agency in one government, and there could be a huge benefit if it is shared. If other municipalities, other provinces, other countries could pull their knowledge as to what works. So, these were some of many examples of applying data and evidence to make our practices more rational.



DIOGO: America, right now, is pulling much less religiously than they did, let's say, 20 years ago. "What impact do you think that had on social rationality?"



STEVEN: Well, there are different aspects to it. For many years, the United States lagged behind other Western democracies in pulling back from religion. America was an unusually religious country. It still is more religious than most of the countries of Western Europe or the Commonwealth. But it has happened in the United States as well. Namely, the United States is becoming less and less religious, especially younger generations. The “Millennials” are less religious than the “Baby Boomers” and the generation “Z” is less religious than the millennials. In part, that is driven by just an inability to believe in miracles, stories and scripture.

And in part, it is also driven from an alienation or withdrawal from all institutions. The younger people are less committed to not just churches and synagogues, but also to the government. They trust less in government and in the press. However, that may not be such a good thing, because it is institutions that offer us our best hope for being rational. In the United States and I think in other countries as well, often the really religious people have an unbalanced influence in government. In other words, their influence is above the actual numbers, once people who are religious are engaged in institutions that bring out their members to all vote, whereas the more secular, less religious people just do not care about any institution; hence, they stay home and do not vote.

So, the number, the percentage of the American population that are evangelical Christians and that are atheists, agnostics and humanists is about the same. But the evangelicals, they all vote, while the atheists and humanists stay home. And that is because of the general disengagement from institutions. And that is not such a good thing.



BRUNA: Professor, the event here, the Innovation Week, has a motto this year: “Dare to transform”. So, it is a call to action for public servants, public agents in Brazil, to build bold and better futures. To start transforming it right now. Hence, one of the questions that we have outlining the program is: “What future would make the past worth it”. On this account, I ask you the same question that we asked our audience.



STEVEN: A future with where you identify what are the things that we value and what are the things that make people better-off. Therefore, there would be longer life, better health, more literacy, more knowledge, more opportunities to enjoy the world, to enjoy nature, to enjoy culture, less violence, less disease, less war. All of those things. Hence, I have shown in my previous books that, most of those measures have showed improvement. Consequently, a future in which we'd have improved even more, would be a future that would make the path worthwhile. I do not believe in a utopia. I do not believe the world will ever be perfect. Besides that, I believe it would be dangerous to try for a utopia. Because a number of reasons, one of them is that people are different. People disagree.

Besides that, anything that would make some people happy would make other people less happy. The problem with the utopia is that the people in power would have to impose their vision on everyone else. Moreover, if they think that they have a plan to make the world perfect forever, it would mean that anyone who disagrees with them would be standing in the way of a perfect world. How evil is that?

Well, we know utopian schemes like Mao's communist China, like Hitler's a thousand-year Reich. Hence, it involves massive genocides, because the people who opposed them, who were not part of their neat plan, were nuisances that had to be pushed out of the way. Also, among the things that we value, there are trade-offs. For instance, we all agree that freedom is a good thing and health is a good thing.

However, if you give people freedom, part of that freedom includes liberty to do unhealthy things. People will drink too much. They will take drugs. They will drive too fast. Furthermore, there is a trade-off between freedom and equality. If you allow everyone to compete economically, according to their talent or to their luck, some people will end up with more than others. We cannot have both. On the other hand, if we make everyone the same, that means restricting what some people do, compared to others. So, they will not get ahead. In this sense, those trade-offs are with us permanently. And that is why trying to make everything perfect is a recipe for disaster. On the other hand, trying to make things better, so that even with those conflicts, we are all somewhat richer, freer, healthier and happier. That is attainable. We know it is attainable because we have attained it in the past. We are healthier, live longer and are richer now than we used to be. Therefore, there is no reason that this cannot be extrapolated forward.



DIOGO: If nationalism and communism were the two greatest alternatives to democratic liberalism in the 20th century “What do you think there will be in the 21st century?”



STEVEN: Well, certainly nationalism in the form of authoritarian populism, is very much a 21st century phenomenon. And, both the audiences in Brazil and the United States have had a very strong taste of that. So, that would be one threat, authoritarian nationalist populism. The other one is a kind of a leftist radicalism that would just tear everything down because of a belief that the system is so corrupt, decadent and evil, that anything would be better than what we have now; rather than trying to work for progress, by solving the problems that we face. So, that kind of destructive nihilism is appealing to many people. It is a kind of need for chaos and burning it down. So, that is another threat. And, to some extent, I think the, what is sometimes called “Wokeism”, in the United States. Which means, the identitarian politics where people are not treated as individuals, but rather as members of groups of races or sexual orientations, for instance. And they are thought to be in permanent conflict. So, the only way that you can raise one up is by pushing another one down. That is, I think, a recipe for conflict and for further polarization that works against the kind of constant compromises and the recognition of individual human rights, which are the basis for liberal democracy.



BRUNA: So, Professor, one of the objectives of this event and of our work is to catalyze the formation of a new ethos of the 21st century public servants. Which for us, should be emboldened by daring to transform. So, I wanted to ask you quickly to complete the following phrase: “The public leader of the 21st century is a leader that...”



STEVEN: Does the best use of evidence to design policies that make people better-off. I know that is very vague. That it may not be saying anything. But certainly, the use of evidence is, I think, going to be crucial. And also, the goal of solving problems. So maybe, the best leader would be one who believes that problems are inevitable. Problems are solvable. And solutions create new problems that must be solved in their turn.



BRUNA: You have just published a book and we are, as I said, very curious to read it in Portuguese. But, before we wrap it up, I wanted to ask you, “What are you working on next?”



STEVEN: Well, I’m going to write a book on the concept of common knowledge, the technical sense from game theory. In other words, I know something, you know something, I know that you know it, you know that I know it, and so forth. Therefore, this is a logical concept, which I think has a psychological counterpart. Namely, the difference between something that everyone knows is true and something that is out there, that is public or common knowledge. There is a huge difference between these two. And, I have done experimental work to probe how it affects our emotions and our language. So, I will have a new book, not for another three to four years, that will be called, “Don’t go there: Common knowledge and the science of hypocrisy, civility, outrage and taboo”.



BRUNA: Thank you! I know and Diogo knows it, that this was a fantastic conference in our Innovation Week 2021. Thank you so much!



DIOGO: Thank you so much, Steven Pinker!



STEVEN: My pleasure. Thank you for having me! Nice to speak with you all!

