



Munk Debate On Progress

November 6, 2015

Rudyard Griffiths: Hello. Good evening, everybody. My name is Rudyard Griffiths. I'm the chair of the *Munk Debates*. It's my privilege to have the opportunity to moderate tonight's contest.

I want to start this evening by welcoming the television audience across North America tuning into this debate, everywhere from CPAC, Canada's Public Affairs Channel, to C-SPAN across the continental United States.

A warm hello also to our online audience watching this debate right now on www.munkdebates.com. It's great to have you as virtual participants in tonight's proceedings.

And, finally, hello to you, the over 3,000 people who have sold out Roy Thomson Hall for yet another *Munk Debate* just weeks after our much-acclaimed election debate. It's terrific to have all of you here tonight.

Well, tonight's debate is a bit of a changeup for us, a departure of sorts. We're not going to be talking this evening about a specific geopolitical issue or cultural debate. Instead, we're going to think bigger thoughts. We're going to reflect on the nature of our society, its most deeply held beliefs, all in the context of the question we're posing tonight. Is humankind progressing? Do mankind's best days lie ahead?

To reflect on this big debate, a debate that has raged in our society, in our civilization for over two centuries, we've once again assembled people who we think are some of the sharpest minds, some of the brightest thinkers, to bring them here to Toronto, to this stage, for our edification.

This would not be possible, with this debate and with all of our past debates, without the generosity, the support, and the vision of our host tonight. Please join me in an appreciation of Peter and Melanie Munk and the Aurea Foundation.

Thank you, guys. Bravo.

Well, let's get our debaters out here on stage and our debate under way. Our resolution is "be it resolved humankind's best days lie ahead..."

Please welcome, speaking for the pro team, Montreal native, pioneering cognitive scientist, and the internationally-renowned writer and scholar, Steven Pinker.

Thank you, Steven. Thanks for coming.

Steven's teammate is a member of the British House of Lords. He's a storied journalist, a contributor to *The Times* of London, and the author of a string of big, internationally-bestselling books on the intersections of evolution, ideology, history and progress. We know him as Matt Ridley. Matt, come on out.

Thank you, Matt. Great to have you here.

Matt Ridley:

Thanks.

Rudyard Griffiths:

Well, one great team of big-thinking debaters deserves another, to consider our resolution, "be it resolved humankind's best days lie ahead..." Please welcome the celebrated UK-based author, broadcaster, and thinker, one of the leading public philosophers of his generation, Alain de Botton.

Thank you, Alain. Thanks for making the trip.

Alain's debating partner is a person we love to read regularly in *The New Yorker* where he's a staff writer. We've also read a few of his books - I hear there's over ten million in print. Ladies and gentleman, Canada's Malcolm Gladwell.

Malcolm, thank you. Thanks for doing this.

Okay. Let's run through, quickly, our pre-debate checklist. I'm going to start by asking our audiences to power up their smartphones. We've got a hashtag going, #munkdebate. We've also got, for our online audience and those of you in this hall, a running poll to gauge your opinion of the debate throughout the hour and a half proceedings. The website for that is munkdebates.com/vote.

We've also brought back, after a hiatus during our election debate, our lovely countdown clock. This is going to keep our debaters on their toes and our debate on-time. So, those of you who are new to the *Munk Debates*, when you see this clock read zero, want to join me in a round of applause for our debaters and that will let them know that their allotted time has been used up.

I next want to have us review our ballot results for the start of this evening. Each of you were asked to vote, all 3,000 of you coming into this auditorium tonight, on the resolution, "be it resolved humankind's best

days lie ahead...” - agree, disagree ... seventy-three percent agree, twenty-seven percent disagree [ed. note: *the final confirmed tally of pre-debate votes was counted at 71% agree and 29% disagree*]. The cup is definitely half full for this group.

But, as we know, these debates change, they’re fluid. So we asked you, depending on what you hear tonight, are you willing to change your vote over the next hour and a half? Ninety-one percent of you, yes, could change their vote.

Only ten percent of you were committed optimists. So, wow, we have a debate on our hands.

I’m now going to call on our first opening statement and that will go to the pro team, as is customary. Steven Pinker, your eight minutes begins now.

Steven Pinker:

Fellow Canadians, citizens of the world, I plan to convince you that the best days of humankind lie ahead. Yes, convince.

Declinists speak of a faith or belief in progress but there’s nothing faith-based about it. Our understanding of the human condition must not be grounded in myths of a fall from Eden or a rise to Utopia, nor on genes for a sunny or morose temperament, nor on which side of the bed you got out of this morning.

And it must not come from the headlines. Journalists report plane crashes, not planes that take off. As long as bad things haven’t vanished from the earth altogether, there will always be enough of them to fill the news. And people will believe, as they have for centuries, that the world is falling apart.

No, the only way to understand the fate of the world is with facts and numbers. That is to plot the incidents of good and bad things over time, not just for charmed places like Canada but for the world as a whole, see which way the lines are going, and identify the forces that are pushing them around.

Allow me to do this for ten of the good things in life. First, life itself. A century and a half ago, the human lifespan was thirty years. Today, it is seventy and it shows no signs of levelling off.

Second, health. Look up smallpox and cattle plague in Wikipedia. The definitions are in the past tense, “smallpox was a disease”, indicating that two of the greatest sources of misery in human existence have been eradicated forever. The same will soon be true for polio and guinea worm and we are currently decimating hookworm, malaria, filariasis, measles, rubella and yaws.

Third, prosperity. Two centuries ago eighty-five percent of the world's population lived in extreme poverty. Today, that's down to ten percent and, according to the UN, by 2030, it could be zero. On every continent, people are working fewer hours and can afford more food, clothes, lighting, entertainment, travel, phone calls, data, and beer.

Fourth, peace. The most destructive human activity, war between powerful nations, is obsolescent. Developed countries have not fought a war for seventy years, great powers for sixty years. Civil wars continue to exist but they are less destructive than interstate wars and there are fewer of them.

This pin is a souvenir from a trip earlier this week to Colombia, which is in the process of ending the last war in the Western Hemisphere.

Globally, the annual death rate from wars has been in bumpy decline, from 300 per 100,000 during World War II, to 22 in the 1950s, 9 in the '70s, 5 in the '80s, 1.5 in the '90s and 0.2 in the '00s. Even the horrific civil war in Syria has only budged the numbers back up to where they were in 2000.

Fifth, safety. Global rates of violent crime are falling in many places precipitously. The world's leading criminologists have calculated that, within thirty years, we can cut the global rate of homicide in half.

Sixth, freedom. Despite backsliding in this or that country, the global democracy index is at an all-time high. More than sixty percent of the world's population now lives in open societies, the highest percentage ever.

Seven, knowledge. In 1820, seventeen percent of people had a basic education. Today, eighty-two percent do and the percentage is rapidly heading to a hundred.

Eight, human rights. Ongoing global campaigns have targeted child labour, capital punishment, human trafficking, violence against women, female genital mutilation, and the criminalization of homosexuality. Each has made measureable inroads and, if history is a guide, these barbaric customs will go the way of human sacrifice, cannibalism, infanticide, chattel slavery, heretic burning, torture executions, public hangings, debt bondage, duelling, harems, eunuchs, freak shows, foot binding, laughing at the insane, and the designated goon in hockey.

Nine, gender equity. Global data show that woman are getting better educated, marrying later, earning more, and in more positions of power and influence.

Finally, intelligence. In every country, IQ has been rising by three points a decade.

So, what is the response of the declinists to all of this depressing good news? It is, “Just you wait. Any day now a catastrophe will halt this progress or push it into reverse.”

But, with the possible exception of war, none of these indicators is subject to chaotic bubbles and crashes like the stock market. Each is gradual and cumulative. And, collectively, they build on one another.

A richer world can better afford to clean up the environment, police its gangs, and teach and heal its citizens. A better-educated and more female-empowered world will indulge fewer autocrats and start fewer stupid wars.

The technological advances that have propelled this progress will only accelerate, Moore’s law is continuing and genomics, neuroscience, artificial intelligence, material science, and evidence-based policy are skyrocketing.

What about the science fiction dystopias? Most of them, like rampaging cyborgs and engulfment by nanobots, are entirely fanciful and will go the way of the Y2K bug and other silly techno-panics.

Two others are serious, but solvable. Despite prophecies of thermonuclear World War III and Hollywood-style nuclear terrorism, remember that no nuclear weapon has been used since Nagasaki, the Cold War ended, sixteen states have given up nuclear weapons programs (including this year, Iran), the number of nuclear weapons has been reduced by more than eighty percent, and a 2010 global agreement locked down loose nukes and fissile material.

More importantly, the world may only have to extend its seventy-year streak another few decades. A road map for the phased elimination of all nuclear weapons has been endorsed in principle by major world leaders, including those of Russia and the United States.

The other threat is climate change. This may be humanity’s toughest problem but economists agree it is a solvable one. A global carbon tax would incentivize billions of people to conserve, innovate, and switch to low-carbon energy sources, while accelerated R&D in renewable energy, fourth-generation nuclear power, and carbon capture would lower their costs.

Will the world suicidally ignore these solutions? Well, here are three *Time Magazine* headlines from just the last month: “China shows it’s serious about climate change”, “Wal-Mart, McDonald’s and 79 others commit to

fight global warming” and “Americans’ denial of climate change hits record low”.

A better world, to be sure, is not a perfect world. As a conspicuous defender of the idea of human nature, I believe that out of the crooked timber of humanity, no truly straight thing can be made. And, to misquote a great Canadian, “We are not stardust, we are not golden, and there’s no way we’re getting back to the garden.”

In the glorious future I am envisioning, there will be disease and poverty, there will be terrorism and oppression, and war and violent crime. But there will be much, much less of these scourges, which means that billions of people will be better off than they are today. And that, I remind you, is the resolution of this evening’s debate.

Thank you.

Rudyard Griffiths: Two seconds to spare. Steven, that was an impressive start to the debate. Alain, you’re up next. Your opening statement, please.

Alain de Botton: Thank you so much. So, if we’re going to be optimists, like our learned friends on the opposing team, we’re really going to look at distilling the themes that Steven and Matt are going to talk about to four things. Let’s look at the four areas where optimists think we’re going to make the largest gains.

They are believers in the victory of knowledge over ignorance. Ignorance, a big scourge of our times, will be resolved through the light of reason. That’s the great hope of the optimists.

Poverty will be wiped out through the growing economies of the world. We will no longer have desperate ills of poverty that have accompanied us for so long.

The third point: war. War will be wiped out by the rule of the law and the increasing monopolization of power by states that follow international regulations.

And, lastly and fourthly, disease will be wiped out through that wonderful tool: medicine.

And with those four things, ignorance, poverty, war and disease under control, we will land in a sunlit uplands that our optimistic friends want to tell us are on the way.

I’ve got one major objection and it’s a slightly autobiographical one: I’m Swiss. I’m a citizen of Switzerland and I spent a bit of time there. And the thing about Switzerland is that it’s solved all these problems.

It's got a fantastic education system. The average salary is \$50,000 a year, the country has been at peace since the Treaty of Westphalia in 1648, and the hospitals are superlative. Yet, it's not paradise. Indeed, there are legions of problems, problems that I would describe as first-world problems, which are not jokes. They are genuine problems.

Switzerland is where Swaziland, Botswana, and Liberia may be in 500 years' time. But the bad news, ladies and gentleman, is that Switzerland is not perfect. And it's for that reason that we have to discount the optimistic tenor of the motion tonight.

Why is Switzerland not perfect and countries like it? Well, firstly, because idiocy is not removed by reason.

The great promise of the enlightenment was if you tell people what the right thing to do is they will do it; that evil is the result of ignorance. It's not. Idiocy is more stubborn than that.

Poverty is not eradicated by raising the GDP. There are millionaires and billionaires who feel they don't have enough. And that is the true definition of poverty: the sense you don't have enough. And, unfortunately, that rises and is present at any income level.

War is not the last word on meanness, and violence and cruelty. These things continue in societies even though people are not bludgeoning each other to death.

And, finally, even though there's no smallpox or guinea worm in Switzerland, people still, despite the wonderful advances of medicine, die.

Death has not been eradicated. And as far as I know, perhaps my learned friends have another view, there is no cure for this on the horizon. These are the problems that we face.

Now, someone may say, yes, but with machines, and technology, and the internet and the iPhone we will, perhaps, gather together and produce a creature who is perfectly wise, who is perfectly kind and immortal. Maybe we will, but this person is not a human being.

Homo sapiens is a different species. We will never be able to evolve out of these road blocks that I've been telling you about. I believe that atop of spinal cords we have what I like to call a 'faulty walnut'. A walnut mind that has very destructive impulses, that is immune to certain kinds of education and that resists any attempt to help it in many situations.

I believe, ladies and gentlemen, that we must go towards a different sort of philosophy that will serve us much better. And that philosophy I call pessimistic realism. It's a counter to the boosterish attitude you find in

modern science, in modern business, which for different sets of reasons is permanently trying to get us to feel more cheerful about things.

This kind of boosterishness is dangerous and cruel. Think of its application in relationships. Imagine if somebody said, "I'm perfect and getting more perfect and I'm looking for someone who is perfect and willing to become ever more perfect." This would be a disastrous kind of relationship to be getting into.

Forgiveness, and tenderness, and sympathy is based on an acceptance of our own fundamental imperfection. We are flawed creatures and need to keep our flaws in mind in order to be able to be truly human.

There is something, frankly, frightening about perfectionism. We are angry whenever we believe that we were promised paradise and we got a traffic jam, lost keys, a disappointing relationship, a less-than-optimal job. We are furious and our sense of entitlement comes back to bite us. This is the danger of the age. We cease to appreciate things when we believe that life should be perfect and we can eradicate all known problems.

Why do old people love flowers? They love flowers because they're so aware of the imperfections of life that they're willing to stop by some of the smaller islands of perfection, like flowers, and appreciate them. We don't do this. If we have such a grand narrative in mind of the perfection of the species, we will not stop to appreciate.

And, lastly, humour. Humour is born out of the gap between our hopes and our reality, and those who know how to laugh are also those who know how to be sympathetic to our failed hopes and our failed dreams. And we will all have them.

I think many of the worst movements in history have been born out of the minds of people who believed in perfectionism: scientists, politicians and others who believed that we could straighten things out, once and for all. And this is an incredibly dangerous philosophy of life. The perfectionists amongst us are those who very often ruin and wreck the world. And true human progress is often the work of people who are much more modest, who accept their own flaws and the flaws of others, and are not attempting to make a paradise on Earth.

Christianity - I speak to you as a secular Jew - very wisely insisted that we are frail, fragile and, all of us, broken. That's a very useful starting point. It's a conservative, classical starting point that is, I believe, at the root of wisdom.

And, ultimately, this debate, though it seems to be a debate around science and we have many sciencesy people in the room, really, it's a debate about

wisdom and the philosophy of wisdom that you might want to adopt in your own life.

And I want to argue that beneath the philosophy, beneath the theories of the opposing team, is a philosophy that is incredibly brittle, and possibly intolerant and cruel. It's not a liveable philosophy. But, really, at the root of humour, humanity, gentleness, and forgiveness is an acceptance that we, with our faulty walnuts, are in perfect understanding of ourselves and the world that we live in.

We must go easy on ourselves and be extremely modest. And it's this modesty that I want to sell to you and it's on this basis that I firmly believe you should reject the motion before you. Thank you.

Rudyard Griffiths: A spirited debate underway. And, Matt Ridley, you're up next for the pro team.

Matt Ridley: What a pity we can't have a vote between who prefers bald Brits to curly-haired Canadians but ...I just lost ten seconds with that.

Woody Allen once said, "More than at any time in history, mankind faces a crossroads. One path leads to despair and utter hopelessness. The other to total extinction. Let us pray we have the wisdom to choose wisely." And that's the way, pretty well, everybody talks about the future. When I was young, the future was especially grim. The population explosion was unstoppable, famine was inevitable, pesticides were giving us cancer, the deserts were advancing, the oil was running out, the rainforests were doomed, acid rain, bird flu and the hole in the ozone layer were going to make us sick, my sperm count was falling, and a nuclear winter would finish us off.

You probably think I'm exaggerating. Well, here's what a best-selling book by the economist Robert Heilbroner concluded, in the year I left school: "The outlook for man, I believe, is painful, difficult, perhaps desperate and the hope that can be held out for his future prospects seem to be very slim indeed."

It was only a decade or two later that it dawned on me that every one of these threats had either been a false alarm or had been greatly exaggerated. The dreadful future was not as bad as the grownups had told me it would be. Life just kept on getting better and better for the vast majority of people.

The human lifespan has been growing at the rate of five hours a day for fifty years. The greatest measure of misery anybody can think of, child mortality, has gone down by two thirds in that time.

Malaria mortality is down by an amazing sixty percent in fifteen years. Oil spills in the ocean are down by ninety percent since the 1970's. An object the size of a slice of bread lets you send letters, have conversations, watch movies, find your way around, take pictures, and tells hundreds of people what you had for breakfast.

And what's getting worse? Traffic, obesity; problems of abundance, note. Here's a funny thing: most improvements are gradual, so they don't make the news. Bad news tends to come suddenly. Car crashes make the news; falling child mortality doesn't. And, as Steve says, every year the average person on the planet grows wealthier, healthier, happier, cleverer, cleaner, kinder, freer, safer, more peaceful, and more equal.

More equal? Yes. Global inequality is on the way down and fast. Why? Because people in poor countries are getting rich faster than people in rich countries. Africa is experiencing an astonishing economic miracle these days, a bit like Asia did a decade or two ago. Mozambique is sixty percent richer per capita than it was in 2008. Ethiopia's economy is growing at about ten percent a year.

The world economy has shrunk in only one year since the Second World War, in 2009, when it dipped by less than one percent before growing five percent the next year. If anything, the march of prosperity is speeding up.

But, my optimism about the future isn't based on extrapolating the past. It's based on why these things are happening. Innovation, driven by the meeting and mating of ideas to produce baby ideas, is the fuel that drives them. And, far from running out of fuel, we're only just getting started. There's an infinity of ways of recombining ideas to make new ideas and we no longer have to rely on North Americans and Europeans to come up with them. The internet has speeded up at the rate at which people can communicate and cross-fertilize their ideas.

Take vaping. In my country there are more than four million people who've, pretty well, given up smoking because of e-cigarettes. It's proving to be the best aid to quitting we've ever come up with. It's probably about as safe as coffee. And it was invented in China by a man named Hon Lik, who combined a bit of chemistry with a bit of electronics. And we're all benefiting from that.

So, today, inventions are happening everywhere and we're benefiting from them. But, isn't all this progress coming at the expense of the environment? Well, no, often the reverse. Many environmental indicators are improving in many countries: more forests, more wildlife, cleaner air, cleaner water. Even the extinction rate is coming down compared with a hundred years ago, for the creatures we know most about - birds and

mammals - thanks to the efforts of conservationists. And the richer countries are, the more likely their environment is improving. The biggest environmental problems are in poor countries.

But, what about population? The population growth rate of the world has halved in my lifetime, from two percent to one percent. And the birth rate is plummeting in Africa today. The world population quadrupled in the twentieth century, but it's not even going to double in the twenty-first, and the UN thinks it will stop growing altogether by the 2080s. Not because of war, pestilence and famine, as gloomy old Parson Malthus feared, but because of prosperity, education and health.

There's a simple and beautiful fact about demography, when more children survive people plan smaller families. With slowing population growth and expanding farm yields, it's getting easier and easier to feed the world.

Today, it takes sixty-eight percent less land to grow the same amount of food as fifty years ago. That means more land for nature. In theory, you can feed the world from a hydroponic farm the size of Ontario and keep the rest for wildlife.

And the planet is getting greener. Satellites have recorded fourteen percent more green vegetation than thirty years ago, especially in arid areas like the Sahel region of Africa.

But, am I like the man who falls out of the skyscraper and as he passes the second floor shouts out, "So far so good"? I don't think so. You'll probably hear the phrase "turning point" in this debate. You'll be told that this generation is the one that's going to be worse off than its parents, that it's going to die younger or see sudden deterioration in the environment. Well, let me tell you about turning points. Every generation thinks it stands at a turning point, that the past is fine but the future is bleak.

As Lord Macaulay put it in 1830, "In every age everybody knows that up to his time progressive improvement has been taking place. Nobody seems to reckon on any improvement in the next generation. We cannot absolutely prove that those are in error who say society has reached a turning point, that we have seen our best days. But so said all who came before us and with just as much apparent reason."

We filter the past for happy memories and filter the future for gloomy prognoses. It's a strange form of narcissism. We have to believe that our generation is the special one, where the turning point comes. And I'm afraid it's nonsense.

Macaulay again, to end, “On what principle is it that with nothing but improvement behind us we are to expect nothing but deterioration before us.”

[Applause]

Malcolm Gladwell: Yeah. As I was listening to the two esteemed speakers for the proposition, Mr. Pinker and Mr. Ridley ... by the way I feel like we should come up with a term for them, a more elegant term. I would suggest maybe we call them the Pollyannas. And since we, strangely, don't have a woman on stage, which is odd since it's 2015, I thought we could, more usefully, refer to them as Mr. and Mrs. Pollyanna.

And I will leave it to your imagination to figure out who is Mrs. and who is Mr. Although I feel like a simple look at the contents of their scalp will give you some indication of which direction is appropriate.

In any case, as I was listening to Mr. and Mrs. Pollyanna my mind wandered, as I'm sure many of your minds wandered as well, and I began to think of all the possible scenarios under which I would agree with them. And so, for example, suppose we add just three words to the proposition, “Be it resolved that the best days lie ahead for Mr. Pinker and Mr. Ridley”, that's absolutely the case. Mr. Ridley is a member of the House of Lords, one of the greatest sinecures in the history of the Western world. Mr. Pinker is on the faculty of Harvard University, which might usefully be described as America's answer to the House of Lords. It's absolutely the case their best days lie ahead. No one is going to dispute that.

Supposedly, we're debating “Be it resolved that Canada's best days lie ahead.” Absolutely true. You just had a massive upgrade at the leadership position.

But, sadly, not all of us live in Canada. I live in the United States but only have to watch five minutes of the Republican presidential debates to know that that proposition is decidedly not true for those people south of the border.

But, perhaps most seriously, and I'm going to get to the point here, if this proposition was “Be it resolved that humankind's best days historically have laid ahead”, I think the answer is absolutely yes. And that is exactly what my two opponents have done.

They have beautifully made the case that if we go back into the past and we project forward to the eighteenth century, the seventeenth century, the nineteenth century, 1950, 1975, and we fast-forward to the present day, things have been on an upward trajectory. And I think we can all say that's absolutely the case.

But, this debate is not about the past, right? It's about the future. It's about whether things get better from this point going forward.

And what I want to say is that the notion that the future is going to get better is hopelessly naïve. And the word 'better' is misplaced. What we really, I think, are facing when we look at the future is a future that's different.

Now, what do I mean by that? Well, I was recently at a conference and I was chatting with some people internet security specialists and they said, "What do you worry about? What's on your mind?" And I said, "Well, you know, we've done a very good job recently at dealing with the everyday low-level threats that used to comprise the world of hacking, the guy from Bulgaria who wants to steal your credit card, right? There's thousands of those threats. We're doing a good job of keeping them at bay."

But, what terrifies us is what they called digital 9/11, right? Someone, some nation state comes in, hacks their way into the electrical infrastructure of North America and shuts off the power for a week. That terrifies them. Or someone goes in, hacks into a thousand cars simultaneously on the 401, and causes a massive traffic jam and car accident. Now, that might not be substantially different from the way the 401 is at the present time but it would come as something of a shock. Or another example. I'll just give you a series of random examples. There are so many of these I could go on and on and on for many minutes.

But, not long ago, I was reading a paper in a political science journal and it was all about the impact of cellphone use in Africa. And it pointed out that the introduction of cellphones in Africa has had an extraordinary effect on the lives of ordinary Africans, right? It has permitted them to do all kinds of things they could never do in the past.

But, at the same time, it is absolutely the case that the introduction of cellphones has made the job of coordinating and executing actions and military operations by terrorist groups, like ISIS and Boko Haram, a lot easier than it was in the past.

Or, let me give you another example: it's absolutely the case that our ability over the last 25, 50 years to deal with what might be called 'ordinary climate crisis' has gotten an awful lot better. I don't fear, nor do most people fear, famine today in the same way that we might have feared it 25 years ago. Our ability to come up with disease-resistant or drought-resistant crops and our ability to come up with much more effective desalinization technologies have meant that the threat of that kind of environmental crisis is absolutely receding.

But, if you talk to a climate expert, that's not what they're worried about. They look at what just happened in Mexico, where we had one of the biggest and most ferocious hurricanes ever recorded, and they say, "We look at warming trends around the world in the world's oceans. We're worried that one of those mega-hurricanes is going to come along and deliver a blow, the likes of which we've never seen before," right?

The powerful engine of human activity is what allows us to create drought- and famine-resistant crops but it's also what is driving climate change, which is a risk of a whole other order.

Now, what do all these examples have in common? What they tell us is that, as a society, we have been engaged not in the reduction of risk but in the reconfiguration of risk. You don't have to worry about a famine every five years but you have to worry about a mega-hurricane coming along and wiping out Miami. You don't have to worry about a guy in Romania stealing your credit card but you have to worry about North Korea coming in and shutting off the power for two weeks, right?

And having a cell phone in Africa means that your life is a lot easier than it would have been five or ten years ago but it also means that the threat to you from terrorist groups is greater and more pervasive than it would have been five or ten years ago.

So what does that mean for our friends, Mr. and Mrs. Pollyanna? Well, it means that everything they told you is true. It's all true. I sat there listening to the two of them, nodding my head and saying you couldn't have spoken more truthfully, and realistically, and honestly about the trajectory of all these different trends.

But, it's only half the story, right? To my mind, what this debate is really about is whether the change in the nature of the risks that we face is something that ought to scare us. And I think the answer is obvious: it should.

Rudyard Griffiths: Excellent opening statements, gentlemen. Now, to move the debate forward what we're going to do is have each team rebut what they've heard from the other side. We're going to hear from the pro team first. Mr. Pinker, we're going to put three minutes on the clock. Let's hear your rebuttal to what Alain and Malcolm have said so far.

Steven Pinker: I'll start with my response to Alain, which is twofold. First of all, I think Alain de Botton has shown up to the wrong debate. I don't remember ever having been invited to a debate whose resolution is that in the future people will be immortal. Nor that foolishness will evaporate from the surface of the earth, nor that we will never again lose our car keys. That is,

the resolution of the debate is not that a perfect world is in our future but, rather, the best days are to come.

My second response is, “Are you serious?” Are you saying that you willing to go to a peasant in Cambodia, or Sudan, or Bangladesh, or Afghanistan and say, “Listen, I’ve been there. You worry about your child dying, your wife dying in childbirth, you’re full of parasites, you don’t have enough to eat but, you know, trust me, it’s no great shakes to live in a country like Switzerland. True, your child might not die in the first year of life but, you know, when they’re a teenager they’re going to roll their eyes at you. And you may not have to live under the shadow of war and genocide but people will still make bitchy comments. And you may not be hungry but, you know, sometimes the wine will have a nose that’s a bit too fruity.”

I think the response of billions of people on earth would be, “Well, thanks but, you know, I think I would like to find out for myself.”

So when it comes to which position is cruel or unwise, I think that that’s an accusation that can be turned around.

As for Malcolm Gladwell, it is true that in the luxury of your imagination you could imagine all kinds of catastrophes and that we have no guarantee that some of the scenarios played out in Hollywood won’t happen, that some hacker in Bulgaria won’t shut down the electrical system.

On the other hand, there’s a big difference between a fantasy and a likelihood. There’s also a big difference between a nuisance, like stealing your credit card data, and a catastrophe. And if you have the world’s experts in cyber security from every industrialized country on Earth against the teenager from Romania, I’m going to bet on the experts worldwide.

Finally, if it were true that cell phones caused as much harm as the problems that they eliminated you would see that the rate of death from warfare – [Applause interrupts]

Thank you. Can I complete the sentence?

Rudyard Griffiths: We’ll let you pick up that point when we move into the moderated discussion. The three minutes has expired. We run a tight ship around here. Matt, you’re up next.

Matt Ridley: Well, Mr. and Mrs. Cassandra did a good job of giving you the other side of the story.

I mean, seriously, Malcolm, are we to genuinely think that a big traffic jam caused by a teenager in Bulgaria is a big problem? I mean, there are

far greater problems in the world. And I think one of the things that's interesting about the Cassandras is that they have told you about the problems of the developed world. They've told you about the problems of rich countries. But there's a billion - I mean, forget losing the grid for a few minutes because of a kid in Bulgaria who hacks into it - there's a billion people in the world who don't yet have access to electricity. And we know that when they get it, it transforms their lives. And we know that there's nothing stopping us getting to it except will and resources and that kind of thing. So, I think there's every reason to think that we can tackle those problems.

And as Steve was just saying, before he was rudely interrupted by your applause, if it was really true that cellphones, which give the average African the chance to do mobile banking, the chance to advertise his number so he can get a job, the chance to communicate with his friends relatively cheaply, if it was really true that that which has brought wonderful improvements to people's lives was also making war worse, we would see it in the numbers. And we're not. People were able to organize wars before cellphones and they still will afterwards.

And as for Alain, I mean, I think I heard you define poverty as a millionaire who thinks he hasn't got enough.

I don't think that's poverty. I think poverty is when people really can't afford to feed themselves or to survive. And that's what I'm concerned about. I'm not looking back at the past, like, Malcolm said. I specifically said I wasn't basing my optimism on that. I'm basing it on what we can achieve, what we know we can achieve, what we know we can do, and what we can bring out to improve people's lives, the people who really need it, which are the people in the developing world.

This world isn't perfect, definitely not. That's the whole point of optimism. Voltaire defined the word 'optimism' as someone who thought the world already was perfect. That's what the word meant when it was coined. Now it means something different. It means you don't think the world is perfect, you want to improve it.

And if, along the way, that means that when we get to Switzerland, we stop being able to appreciate flowers and we lose our sense of humour, well, maybe it's a price worth paying.

Rudyard Griffiths: Well done. We'll now get the rebuttals from the con team. And, Alain, you're up first.

Alain de Botton: Well, the Pollyannas are trying to get us to feel that their approach is somehow slightly risky, and very modern, and subtle, and interesting. It is,

in fact, the mainstream boosterish philosophy of the mainstream press, of capitalism, and of science. It's the messages that you hear all the time. It's the new iPhone, it's the new little widget that's going to make your life better. We hear this all the time.

We are surrounded by voices like those of Mr. and Mrs. Pollyanna who sell us a boosterish message and there's nothing particularly fresh or interesting in what they're telling us. We hear all the time that we're heading for sunlit uplands.

Yes, there are a few voices in newspapers like *The Guardian* and *The New York Times* who will say that everything is grim, but these are minority voices. They loom large in the Pollyannas' imaginations because they move in those circles. But, basically, in the world out there, the big megaphone is given to people who tell us that life is going to be perfect.

This is part of what I'm fighting against because I think it's such a dangerous and inhuman philosophy. At the dawn of Western civilization the ancient Greeks invented a form of theatre that they called tragedy. And the point of tragedy was to remind a city state of its constant vulnerability to reversal and, therefore, of its need for extreme modesty in the face of the unknown.

And this is what disturbs me so profoundly about Mr. and Mrs. Pollyanna: their arrogance. They are themselves both charming people, but their attitude and the attitude that goes with their views is of an underlying, brittle arrogance, which I think is ultimately dangerous for us. They have an extremely materialistic view of human beings, as if the only concern that they have is the material side of life.

Now, it's very easy to say, "Ah, well, this guy, he's only concerned with the problems of the rich world." But, we live in Canada in the rich world. There are twenty-two countries that qualify as rich. And let's not forget them because the whole rest of the world, the people that they're interested in, are trying to become rich.

So, the problems of the rich world are the problems we need to be looking at and they tell us a very complicated story: that even when the last malaria bug has been eradicated, humankind remains incredibly vulnerable to a host of challenges.

And it's the refusal of Mr. and Mrs. Pollyanna to take these challenges as seriously as Aeschylus, and Flaubert, and Tolstoy, and to look at the real drama of what it is to be human. That is what disturbs me in the attitude of modern science and its boosterish philosophy. So, I do urge you to look rather more carefully at the proposition. Thank you.

Malcolm Gladwell: I tried to make a list when I was listening to the two of them of statements that struck me as odd and so I thought I would just go through them. I have three that struck me as ... the first one was a comment by Mr. Pinker about how he was greatly cheered by the fact that the number of nuclear weapons had been reduced by eighty percent.

Well, forgive me for putting this out, but it doesn't actually solve the problem if you reduce the number of weapons by eighty percent because all it takes is one weapon in the hands of one crazy person to blow us all up. It's a bit like the person with a gun to your head who says, "Don't worry, I've reduced the number of bullets in the chamber by fifty percent." I would not be terribly relieved by that. Perhaps Mr. Pinker would be.

My favourite Pinkerism, if I might coin a phrase, was another one he said which was in talking of climate change, which he glossed over very quickly. He dismissed it with the phrase, I just love this, "economists agree it's a solvable problem." Now, where to start, where to start...

First of all, economists? Like, in what fantasy world do you imagine that economists are the first place you turn for solutions to life's most complicated problems? This isn't a problem that can be solved with demand curves and with moving the interest rate up or down a basis point.

Climate change is something that is embedded in some of the most complex social, and political, and economic problems of our day. It is about changing institutions, about confronting entrenched interests. It's about the way we behave, it's ... I mean, I could go on, and on, and on, and on.

It strikes me as typically of the kind of intellectualized fantasy world that I think our opponents are living in that they would look at this extraordinarily complex issue and turn for help to the economics department of Harvard University or, as the case may be, the House of Lords.

Last one, there were many howlers (or too many howlers, really, I only have 45 seconds left) from Mr. Ridley. But, I was quite drawn to his notion that we could feed the world from a hydroponic farm the size of Ontario.

Only two questions for him. One, first of all, how much science fiction do you read? Secondly, how much hydroponic food have you eaten?

But, the larger question here is, look, it's really, really easy to sit there and imagine a more perfect world. It's a lot more difficult to put many of those utopian notions into practice. On this side of the aisle, we are committed

to reality. And on that side, they've read just a little bit too much propaganda.

Rudyard Griffiths: Great. What a fabulous first half of the debate. We're going to move into our moderated free-for-all. I have all kinds of probing and searching questions in my hand but the debate is flowing. So, I'm simply going to turn it over to you, Matt, and have you respond to what you've just heard from Malcolm. Particularly on this point of - yes, of economics and our ability to use science to predict the future that you think we could and should inhabit.

Matt Ridley: Yeah. Well, I mean, the notion that we're materialists, I think, is one that needs to be nailed because it's all very well saying that materialism doesn't satisfy all of your needs. That's certainly true. But, I think I would rather be well fed and miserable than hungry and miserable. I think satisfying material needs does matter.

And as for Malcolm's point about climate change and climate science, all I can hear from him is a counsel of despair. I can't hear him saying there's nuclear technologies, there's other technologies, there's things we can do. There are all sorts of things we can do. We're trying to summon the political will, we're trying to get the economics right, we're trying to get the technologies right. We haven't succeeded yet in decarbonising the world economy. But to think that it's completely impossible that over the next few decades we could crack that problem is weird. I mean, we may not succeed but it's pretty likely that we will.

Malcolm Gladwell: But the issue, if I might beg to differ, I never said that the issue was that it was impossible. Rather, I said that it was more difficult than you would lead us to believe in. Sort of, as you guys present all kinds of these fantastic scenarios about limitless progress. But, more than that, that climate change represents a kind of threat to progress that is a different order than the threats we've seen in the past. And this goes back to my opening statement --

Matt Ridley: Is that really true? What about --

Malcolm Gladwell: Absolutely.

Matt Ridley: I mean, some of the things that we've - in the past we've faced famine, we've faced disease. These were huge threats to human beings and we've defeated them --

Malcolm Gladwell: You cannot point to a single famine that had the kind of global consequences that a consequential change in the climate of the earth will have, right? Name me a famine from years 0 through 1750 that had the

effect of changing the fundamental structure of the world's oceans. Can't do it, right? You can point --

Matt Ridley: No, but I can name you a famine --

Malcolm Gladwell: You can point to something that happened on a Scottish plain but you can't --

Matt Ridley: -- in France in the 1690s that wiped out fifteen percent of the population of France because we didn't have trade and so we couldn't get food to people in those days. But now, because of globalized agriculture, we get --

Malcolm Gladwell: I would suggest to you the kind of threat that we've been talking about in climate change is a lot greater than fifteen percent of the population of France.

Matt Ridley: Fifteen percent of the - well, I think you're disagreeing with the intergovernmental panel on climate change though.

Malcolm Gladwell: Well, then I guess I'll have to live with that devastating fact for the end of my days.

Alain de Botton: I mean, if I could just say, these back and forths could get rather tedious if one team holds up a graph saying things are getting better and the other one points out, "No, but it could get worse," et cetera. I think we almost have to take a step back and say what is driving this camp to want to assert so rigorously, from what center of your beings is this coming that you feel such a need to insist on something that you --

Matt Ridley: From the data, Alain, from the data, from that facts.

Alain de Botton: Right, but ... right. The data does not point you irrevocably to a sense that, you know, life is going to be made perfect. So --

Steven Pinker: That's not what the debate is about.

Matt Ridley: No, nobody said perfect. Where did this perfect come from?

Steven Pinker: Not perfect, remember. You're at the wrong debate.

Alain de Botton: Mr. Pinker, this is your great let-out clause. Because whenever we point to something you'll go, "Oh, I didn't mean that. Oh, of course that will remain a problem. It's this that I'm interested in."

Steven Pinker: No, no.

Alain de Botton: So we'll say, "What about the rate of, you know, gun use?" and you'll go, "No, no, no, I'm interested in the, you know, South African liver worm virus."

Steven Pinker: No.

Alain de Botton: And so you constantly shift and give ground. So, you'll say, "Okay. I'm not interested in that problem." So, when I mention that the high rate of mental illness you go, "Oh, no. I'm not interested in mental illness. I'm interested in extreme poverty." And then I say, "Well, what about the idea of relative poverty that, you know, famous economist Easterlin pointed out in the 1970s?" you go, "No, no. I'm not interested in relative poverty. I'm only interested in extreme poverty."

So you keep shifting the ground, thereby, making your own position slightly invalid. Because whenever we're saying, "No, there are real grounds for concern about the progress of humanity," you'll say, "Oh, it's not that bit of progress I'm interested in." So we have to define and stick with --

Rudyard Griffiths: Okay. Let's bring Steven in here and have you answer this charge. Are you being selective with your facts?

Steven Pinker: It's utterly false. I mentioned ten dimensions of human wellbeing. All of them have improved. So --

Alain de Botton: Of course. And I could mention another thirty, but the point is there are far more --

Steven Pinker: No, you can't mention another thirty. No, you can't --

Alain de Botton: How many factors are there in human life that assure people's satisfaction? --

Steven Pinker: Wait, wait, wait. Hang on. What --

Alain de Botton: There are far more ten.

Rudyard Griffiths: Alain, let's let Steven ... this is harder than the election debate, people. Okay? Let's let Steven in here.

Steven Pinker: I would like to hear those other thirty, those - other than life, health, education, affluence, peace, safety, intelligence, women's empowerment. What are the other thirty on top of those?

Alain de Botton: Do you know a famous novel, written in the nineteenth century called *Anna Karenina*. Now, the people in *Anna Karenina* --

Matt Ridley: Yeah.

Alain de Botton: -- none of them suffered from your ten. Was it a happy story? No. And that tell us something very crucial, Mr. Pinker, about your narrow --

Matt Ridley: Did we claim we were going to abolish unhappiness?

Alain de Botton: This is another tactical retreat.

Matt Ridley: Don't remember that being --

Alain de Botton: Matt Ridley, this is another tactical retreat that you keep putting off.

Matt Ridley: No, it's not. Happiness is getting better but it's not getting perfect --

Alain de Botton: We define an area where you have lost and you've got, "We're not interested in that bit. We're only interested in the liver worm." So, why don't you say what you are interested in and stick and defend it?

Matt Ridley: Alain, have you looked at the data on happiness? Happiness correlates with wealth, between countries, within countries and within lifetimes. It's perfectly true that you can be very wealthy and very unhappy. But, that's all right, because it cheers up other people, so ...

Malcolm Gladwell: You know, Alain, I think, is making a very good --

Steven Pinker: But, I want to mention a couple of things. First of all, the Easterlin Paradox has been resolved. I think you're a decade out of date. The idea that wealth does not correlate with happiness, which is what the Easterlin Paradox was, has been resolved. Angus Deaton just won the Nobel Prize a couple of weeks ago for showing that. And, as Matt said, it's a fallacy.

Alain de Botton: Okay, Steven, do you know there are some people in this room are a little unhappy about various things and they're not in the breadline. And you would go, "Well, I'm sorry, guys, but my data suggests that your happiness does not correlate with your income. And, therefore, your unhappiness is not really real because the data doesn't show that it's real."

Matt Ridley: No.

Steven Pinker: What?

Alain de Botton: In other words, your data leaves so many anomalies --

Matt Ridley: No --

Steven Pinker: What are you talking about?

Alain de Botton: Well --

Steven Pinker: How does the data not show that happiness is real?

Alain de Botton: What I'm talking about --

Rudyard Griffiths: Okay. Let's pause here just for a moment. I want to bring Malcolm in, you were flagging me.

Malcolm Gladwell: Oh. Well, I was just going to back up Alain, because I thought that he was making a very good point with respect to the slipperiness of some of Mr. Pinker's positions.

I wanted to bring up one of the howlers that I didn't have time to go through in my rebuttal, which is on this very point - when he's talking about how we're a lot less murderous today than we were in the past and points out that developed countries haven't fought a war for sixty years, major developed countries. But, I would just simply point out when they did fight that war sixty years ago it was quite nasty, I think, is fair to say.

So, it goes to my point that it is of small consolation that the gap between wars is growing if the wars themselves are of terrifying ferocity. And if the wars themselves contain the possibility of the extinction of the planet, then that, to me, is an extremely important point.

So in pointing to the fact that there's been, wow, sixty years since, you know, England engaged in a major war doesn't tell us much, does it? We have to look very closely at the nature of that conflict. And that's why I return to the point I was trying to make in the beginning, when I said there has been a change in the configuration of risk. That's exactly the point.

Rudyard Griffiths: Okay. That's key --

Malcolm Gladwell: Wars have gotten less frequent but more catastrophic.

Rudyard Griffiths: So, let's come to you on that, Matt, because that's a big part of this debate. Increased complexity, does it equal more fragility. Are we loading the system up with things that are producing these beneficial outcomes now but, just as easily, they could be reversed around to produce calamity?

Matt Ridley: Well, let me give you an example of why that's not the case and that is back to famine again. Nowadays, it's pretty well impossible, very nearly impossible, to have a major global famine, because you would have to have simultaneous droughts in many different parts of the world because of world trade.

So, world trade has reduced the risk by allowing us to turn a shortage in one area into, instead of everybody dying in that area, a general increase in prices around the whole world. And that's what happens.

So, we've actually mitigated the risk by linking up the world. So, when people say we've made the world more risky by linking everybody up, it may be true in some cases but it's not true in a lot other cases. In a lot of other cases, it's actually enabled us to spread the risk to reduce the risk.

Rudyard Griffiths: Does anyone want to come in on this point?

Malcolm Gladwell: Well, I thought I conceded famines explicitly in my - I gave you that one. So you're fighting ... Yeah, I would be more interested if you actually tried to confront some of the --

Matt Ridley: Okay. The point about --

Malcolm Gladwell: -- cases where I disagreed with you than the cases you agreed with me but that might be more effective as a debate tool.

Rudyard Griffiths: Steven, do you want to come in on this?

Steven Pinker: Malcolm, I certainly agree that economists are an inviting target and one can always get a laugh by making fun of economists. But the problem of climate change is an economic problem. All the projections of the worst case scenarios all depend on calculations of economists, namely how many people will burn how many units of fossil fuels --

Malcolm Gladwell: It's a problem that is defined effectively by economists.

Steven Pinker: Moreover --

Malcolm Gladwell: That doesn't make it an economic problem, right?

Steven Pinker: It absolutely is an economic problem because it all depends on how many people will burn how much carbon , fossil fuels --

Malcolm Gladwell: It's like saying if an artist draws a still-life of some apples then apples are an artist's problem. An apple is not an artist's problem.

Steven Pinker: But the analysis of --

Malcolm Gladwell: An apple is a fruit. It exists outside of the realm of artists.

Steven Pinker: Both the analysis of climate change and the possible solutions are economic problems. We know that we can have solar panels, the question is will there be enough solar panels to reduce fossil fuel use? We know that nuclear power can cut into carbon emissions, by how much. We know that people could reduce their consumption enough to mitigate the problem. Will they? Under what kind of incentives...

Malcolm Gladwell: If I might say --

Steven Pinker: So, it's very much a problem of economics.

Malcolm Gladwell: This goes precisely to the point --

Steven Pinker: And William Nordhaus's *The Climate Casino* is the most comprehensive analysis of the chemistry, the history, the economics, and the technology of climate change. He is an economist. Not at Harvard, he's at Yale.

Malcolm Gladwell: Yeah, yeah. Well, your exchange perfectly, I think, encapsulates what Alain and I have been arguing, which is there is something very narrow and almost precious in the way that you have chosen to look at the world.

Matt Ridley: You're very good adjectives, Malcolm.

Malcolm Gladwell: But, you take something --

Steven Pinker: Yes.

Matt Ridley: You're very good at adjectives. Can we have some facts?

Malcolm Gladwell: You take something like climate change - no, hold on, hold on, hold on. I listened to you at great length - agree with me on a position, so it's --

Matt Ridley: Narrow and precious.

Malcolm Gladwell: Look, climate change is something that is effectively described by economists. That does not make it an economic problem. It is a problem. To successfully confront climate change will require the successful coordination of many different sectors of society, on many different levels. To simplify it and to say this is something that we can reduce to a matter of economic analysis is foolish. I mean, it's --

Matt Ridley: Might I add something else at this point --

Steven Pinker: Malcolm, it is not foolish. That's what economists do. Economics is a study of complex interactions across societies --

Rudyard Griffiths: This is not a debate about economists, so let's --

Malcolm Gladwell: You're absolutely right, that's what they do. That's my point.

Steven Pinker: That's --

Rudyard Griffiths: That's right.

Malcolm Gladwell: That's why we should be a little bit concerned because --

Rudyard Griffiths: Let's ask Alain to refocus us, okay?

Alain de Botton: I would just like to ask - because you are coming from a scientific background, I'm coming from a humanistic background. So, for me, the history of the arts is really the description of various forms of human unhappiness, various dilemmas that humans have been in over the centuries. And that's that what the history of literature, and theatre, and poetry is really charting.

And I would just like to ask our learned friends how, in their laboratories, they might try and cope with some of the problems that we see evidence of in literature. So, if Hamlet walked into your lab or some of the dilemmas

raised by Euripides were to be seen through your lenses, what would you do with the levels of human unhappiness that were spotted in Kafka? Would you apply certain forms of medical intervention or how would you attack those --

Matt Ridley: Alain --

Steven Pinker: Okay.

Matt Ridley: Do you think scientists are not human beings? Is that --

Alain de Botton: Well, you're putting that belief to the test here and we'll just check that out. No, but I mean the reason why I'm pressing on this and that we're dealing here --

Matt Ridley: Do we not - if you cut us do we not bleed?

Alain de Botton: No. Well, we'll try that later. But, Matt, you're not really addressing these problems. And I'm just keen to find out what answers science might have --

Matt Ridley: Okay. I'll give you --

Alain de Botton: -- to the very serious kinds of human unhappiness which have tracked human beings through their history.

Rudyard Griffiths: So, I guess the question here is about exterior versus interior progress. And the extent to which do you have a feeling, a theory that progress affects not just the things that humans create, but humans themselves?

Matt Ridley: Do I think that we are going to cure happiness with a - unhappiness with a pill - well, happiness too, if you like - but cure unhappiness with a pill in the next few years to, you know, so that Alain's literary heroes can be less miserable? No, I don't. But --

Alain de Botton: So, what will happen to them?

Matt Ridley: But, I do I think that the progress of science, the discovery of deep geological time, this discovery of the vast excesses of space, the discovery of the genome of what's going on inside our cells. Do I think that has enlarged the human imagination and given us even more exciting things to think about, and to want to write literature and plays and things about? Yes, I do.

Alain de Botton: So, Anna Karenina is standing on the edge of the platform and you're saying, "Hang on, deep geological time is the answer for you, dear." That's your answer, is it? That's the answer of Mr. and Mrs. Pollyanna.

Matt Ridley: Why not? Let's try it. Let's ask her.

Alain de Botton: Deep geological time, fantastic. Tell that to Hamlet as well.

Steven Pinker: Well, I just have to remind you, Anna Karenina didn't actually exist. She's actually --

Alain de Botton: That's --

Steven Pinker: I just have to - neither did Hamlet.

Alain de Botton: Well, she exists --

Steven Pinker: We're talking about billions of people who don't see their children die in the first year of life, who don't --

Alain de Botton: Ah, another shift, another classic shift. You've shift the goal post.

Steven Pinker: No.

Matt Ridley: No, no, it's --

Steven Pinker: Well --

Alain de Botton: Can't you --

Rudyard Griffiths: Let's let Steven finish here.

Alain de Botton: I understand. But, please address the thing under consideration, which is the dilemmas of the psyche. And I'm asking - I asked you and Matt what -

Steven Pinker: I think --

Alain de Botton: How would you respond to some of the dilemmas of the psyche?

Steven Pinker: Yes. I think that if --

Alain de Botton: Matt suggested that deep geological time would be a suitable answer --

Steven Pinker: I think if your child dies in the first year of life --

Alain de Botton: -- what is your answer?

Matt Ridley: I was making a different point.

Steven Pinker: -- that deeply concerns the human psyche. I think it's very relevant to happiness. I think if billions people do not see their children die, that's a much more relevant consideration for the human psyche --

Alain de Botton: Okay. So this is - okay. This --

Steven Pinker: -- for the depths of human existence than Anna Karenina --

Alain de Botton: I just want to point this out, what you're doing. What you're doing ... hang on. What you're doing is you're essentially saying the problems

spotted in literature that – You’re doing a classic move. The problems spotted in literature are not the real problems. You’re like Dickens’ Mrs. Jellyby, the only real problems are the problems of extreme poverty. Only those problems are the real ones --

Matt Ridley: But, I thought we were here to talk about progress, not literary theory --

Alain de Botton: Well, hang on --

Matt Ridley: -- I’m sorry, I’m in the wrong debate.

Alain de Botton: No. So, in other words, the only real problems are the problems of extreme poverty. Whenever I try and shift the conversation towards the problems –

Matt Ridley: No. That’s the problem we’re here talking about.

Alain de Botton: Well, why --

Matt Ridley: We’ll have a debate about literary theory afterwards.

Alain de Botton: I didn’t see anything in the proposition that limited the discussion narrowly - I know that you’re a scientist - but that limited the discussion narrowly to science and material progress. We are, as human beings, matter and spirit.

Matt Ridley: Are you saying --

Alain de Botton: And it behooves us on this panel to discuss both --

Matt Ridley: Yes. But, Alain, remember --

Alain de Botton: And every time I bring it up, there’s no point in saying, “Well, what about people in Liberia” --

Rudyard Griffiths: Gentlemen, I’m going to bookend this portion of the debate, because we’re coming up against time and there’s a few more issues I want to move through on this moderated free-for-all.

Malcolm Gladwell: Can I make one very, very quick --

Rudyard Griffiths: Quick interjection, Malcolm. Go ahead.

Malcolm Gladwell: The position of our esteemed opponents reminds me of that great Yiddish expression, “To a worm in horseradish, the world is horseradish”.

Rudyard Griffiths: Okay. Let’s just --

Matt Ridley: To his little interruption, I would like to --

Rudyard Griffiths: A little ... sorry, go ahead, Matt.

Matt Ridley: Go ahead, go ahead. We’ll move on.

Rudyard Griffiths: All right.

Matt Ridley: I'm just a worm in horseradish.

Rudyard Griffiths: Look, I want you, Matt, to talk to us a bit about your idea about why progress is accelerating, because that's part of the argument here. That better days lie ahead, not simply because things are getting better but the pace at which they're getting better.

Matt Ridley: Well --

Rudyard Griffiths: What is the theory for this acceleration?

Matt Ridley: I mean, I wouldn't stake my debate on the fact that it's definitely accelerating. But, I think there's every chance that, because more people are in contact with more people today and more people are doing the heavy lifting of innovation in other countries than North America and Western Europe, therefore, the chances of lifesaving innovations coming from anywhere are improved.

This morning, in the newspapers in London, there was a story about a baby whose cancer has been cured by gene therapy. This is a first, that's in London. There's probably something similar happening in Japan, et cetera, et cetera. So, all over the world, we're coming up with these new ideas.

But, it's certainly true that improvements don't go at the same rate. I mean, if you go back fifty years everybody thought we were going to see spectacular improvements in transport and we haven't. But, they didn't see that we were going to have such spectacular improvements in communication.

So, communication has gone much faster than we expected. Transport has gone much more slowly. I think we're on the brink of a biomedical revolution that is going to be quite extraordinary. We're not on the brink, we're into it already. The most amazing things are happening in biotechnology and in the treatment of diseases, which are truly very positive for people.

Rudyard Griffiths: So to get you, Malcolm, to react to that - because I think a lot of people, do in their lives, have the sensation of acceleration, the acceleration of technology, the acceleration of discovery, the acceleration of innovation. Why, in your view, does that not speak to some fundamental shift that then supports the argument and the resolution?

Malcolm Gladwell: Well, two reasons. One reason is that the very same things that can create this - and, I agree, a dramatic shift in the progress of certain kinds of change - can also create a parallel increase in risks.

So when you talk about, when Matt Ridley talks about, the fact that we are increasingly connected as people in the globe and that leads to all kinds of positive outcomes. It also leads to all kinds of negative outcomes.

So if you talk to epidemiologists, they will talk about the threat of species extinctions, referring to human beings. The reason that we talk now about species extinctions with respect to human beings is because we are so connected. That makes it possible for some unbelievably lethal organism, virus, whatever to spread all over the globe very, very quickly. And if you talk to epidemiologists, they will tell you we've come awfully close on certain occasions, quite recently, precisely because of that fact.

The second thing is, and it would go to the comment that he was making, Matt Ridley was making about the biomedical explosion. Again, he's absolutely correct that there have been extraordinary and unbelievable changes for the good in terms of medical technology, our ability to address and treat certain diseases. But, once we have established that fact, let us not lose sight of the fact that when you create those kinds of new technological approaches, you create a whole series of new social and economic problems.

So, for example, how do you pay for them? Right? Absolutely everyone who has examined many of these new technological approaches in medicine concedes that they come with a price tag that is, by definition, what, 5X, 10X, the price tag of existing therapies. You have to deal with that fact.

Matt Ridley: Not always, actually, Malcolm --

Malcolm Gladwell: Now, do the problems --

Steven Pinker: Yeah.

Matt Ridley: Not always. There are things that are getting --

Malcolm Gladwell: One last point. All I'm saying is the fact of that new problem that you have created means that we have to temper our enthusiasm about the progress that we've made. It has created a problem --

Steven Pinker: In other words --

Malcolm Gladwell: -- even as it has solved another.

Steven Pinker: In other words, we must listen to economists.

Now, if you're bringing up infectious disease, I mean, there's just no comparison between the vulnerability of the human population in the past compared to the present. Matt mentioned an epidemic in France. There's also the Black Death, which wiped out a quarter of the population of

Europe. The Americas were decimated by the introduction of diseases from the old world, as was the old world by the introduction of syphilis from the new world.

The rate of death from infectious diseases absolutely plunged. And there are dozens of new antibiotics in the pipeline. Of course, there are science fiction scenarios in which the proverbial Bulgarian teenager invents the superbug in his garage. But, a massive and increasingly sophisticated network of expertise in molecular biology that is mastering the machinery of life in a way that mitigates risks that make them a tiny fraction of what humanity has lived with throughout its existence.

Matt Ridley: Earlier, one of you - I can't remember which, because you both look so alike - one of you mocked the worm, the guinea worm, if I remember right. It's worth just talking about, the guinea --

Alain de Botton: I think that was just after you had mocked Aeschylus and Hamlet.

Matt Ridley: Could be, could be. Exactly.

Alain de Botton: Yeah, I think it was just then.

Matt Ridley: It's worth just reminding us what the guinea worm does. There were 3.8 million people with this in the late 1980s --

Malcolm Gladwell: Don't look at me, I didn't say it. What did I do to deserve this?

Matt Ridley: You get it from infected water. It grows down inside your leg until it comes out of a boil in your foot --

Alain de Botton: I'm with you on the guinea worm. I will concede it. Like, I'll make a tactical --

Matt Ridley: And you have to wrap a matchstick around it.

Alain de Botton: Of course. It's marvellous.

Matt Ridley: Draw it out, an inch at a time, over several months.

Alain de Botton: Okay, of course.

Matt Ridley: Now, Jimmy Carter said we can get rid of this, all we need is better filtered drinking water and we can get rid of it. Last year, there were just a handful of about forty cases in South Sudan, that's all that's left.

Alain de Botton: It's not the case that everything is getting worse or that no progress has been made. It's the attitude towards the future that I think we're trying to put our finger on. Mr. Pinker made a charming --

Matt Ridley: So, we're not allowed to be optimistic --

Alain de Botton: There was a charming moment in the green room earlier today when Steven said, "Wouldn't it be funny if, walking home, I happened to bludgeoned to death by a stranger? Given my philosophy, wouldn't it be funny?" And we laughed and Steven laughed. And I think it comes to the heart of what we're saying. The reason it was funny --

Matt Ridley: I thought the green room was off limits.

Alain de Botton: There's an old Jewish saying, "Man thinks God laughs." In other words, it's a lesson in modesty. And Steven was, in his little throwaway joke in the green room, admitting that for whatever his theories, et cetera, he remains vulnerable, he remains mortal. He might be bludgeoned to death; his grand Pollyannish narrative could be undermined.

And I think, ultimately, this is what Malcolm and I are saying. We're not saying that it isn't amazing how many things have happened --

Matt Ridley: Alain. Alain.

Alain de Botton: We're simply trying to caution that in your attitude there is a brittleness which out there becomes sometimes a, kind of, secularized --

Matt Ridley: Are you seriously --

Alain de Botton: -- scientist, messianic tone, which can be pretty grating and get in the way of properly accepting what life is going to be like, which is cyclical --

Matt Ridley: Back to the adjectives again.

Alain de Botton: Which is cyclical.

Matt Ridley: Alain, are you seriously suggesting that if Steve is bludgeoned to death tonight --

Alain de Botton: I very much hope he won't be.

Matt Ridley: -- that I should give up my view of the world getting better?

Alain de Botton: Well, I think --

Steven Pinker: That's it, Steve is dead, so it's all over.

Alain de Botton: Matt, I think - Matt, I think --

Matt Ridley: Alain was right.

Alain de Botton: If you were to go home to bed, having put a drape over Steven's body and seen him off at the morgue, and reassured yourself with some statistics that actually it's statistically very unlikely and ever more unlikely that your dear friend be bludgeoned to death. And simply go to bed --

Matt Ridley: No, I will go to his funeral. I will be very unhappy. But --

Alain de Botton: -- you would be proving our point of your inhumanity. It should change your life because one death --

Matt Ridley: But I wouldn't suddenly turn around and say that proves the whole world is getting worse.

Malcolm Gladwell: We would settle --

Alain de Botton: Because one death and the death of your friend --

Rudyard Griffiths: Gentlemen, we're going to reset.

Steven Pinker: I think I have to - I think I have to have a say in this.

Rudyard Griffiths: Yes, yes, absolutely. We're going to do a reset.

Malcolm Gladwell: We would settle for five minutes of introspection --

Rudyard Griffiths: Maybe some extra security on the way home tonight. We'll arrange for that very soon.

We're going to wrap up the free-for-all with final remarks from Malcolm. And then, Steven, we'll give you the last word, okay? Malcolm, go ahead. Did you have something to say?

Malcolm Gladwell: Well, I was wondering whether you had a question but ...

Rudyard Griffiths: No, no. I wanted to just bookend this discussion about Steve's mortality and go on to our closing remarks --

Malcolm Gladwell: Oh. Well, I was ... no, no, I ... well, I had ... many things, you know, occurred to me as I listened to the two of them. I suppose I can recount my thoughts at this time.

One was I wish I had the kind of cheerful self-confidence that those two have. That whenever I were to imagine a worst-case scenario, I could discuss it as a science fiction fantasy. That's, like, what a wonderful way, I suppose, to banish all unfortunate thoughts. I wish that had occurred to me when I was at my most troubled and angst-ridden as a teenager. I would have had a much happier adolescence.

My other point was --

Alain de Botton: They're going to bring up the guinea worm. Any vulnerability, they're going to bring up the guinea worm.

Malcolm Gladwell: And my other point, in listening to Matt Ridley in that quite hilarious discussion about the hypothetical bludgeoning of our dear friend, Mr. Pinker - I do think Alain had a very good point which is we are asking for

just a little moment of introspection, an understanding that these questions cannot be resolved entirely through a simple appeal to statistics and to what ran in *Nature* or the journal *Science* last week. We would like them to step outside of their very narrowly constrained, scientific universe and just consider these problems in the light of their full complexity. That's really what this side is asking for.

Rudyard Griffiths: Excellent. We're going to give the last word for the moderated portion to you, Steven.

Steven Pinker: Well, since a lot of this debate seems to hinge on my imminent being bludgeoned to death, I'm willing to accept those odds. I think that if I get bludgeoned to death tonight that Matt will concede. But, if I can tweet tomorrow morning that rumours of my death are greatly exaggerated, then I would maintain that our side win, because the chances of any of us being bludgeoned to death are extremely small and a fraction of what they were several centuries ago.

In terms of simplicity versus complexity, Malcolm, are you saying that a scientific approach to the problem is the simplistic one? That instead we should look to Aeschylus or we should look to science fiction?

I would maintain that if you want to understand the world, which way it's going, which scenarios are likely and, most important, how to deal with them, science is the sophisticated way to address these problems, not the simplistic one.

That is, if you want to know what we should do to continue the trajectory to reducing disease, to reducing hunger, to increasing the lifespan, to getting kids to school, to reducing the threat for climate change - yes, science is where you should look. And, no, it is not the simplistic way to deal with these problems or to analyze them.

Rudyard Griffiths: Excellent.

Steven Pinker: And, again, nor is fiction the appropriate way to figure out how to deal with the very serious challenges that we have. The way to deal with it is with science.

Alain de Botton: What?

Rudyard Griffiths: Very good. Let's move on now. This is an excellent free-for-all.

Because we've just heard from Malcolm and Steven, I'm going to change the order of closing statements slightly. So, Alain, we're going to have you go up first.

Alain de Botton: Okay. Look, I'm glad that Steven really nailed his colours. I mean, I didn't think he would just come out with something so crass. He has.

Ladies and gentlemen, I just want to freeze the moment. One of our great scientists has said that literature is not real, it's made up, okay? In other words, he's equating the fact of the work of the imagination as something that has no validity, okay? This is one of great minds. He is arguing this and he is arguing that science has the answers and the humanities have none of the answers.

This is what I thought I was terrified about. Steven has reassured me that I was right to be terrified about it.

Because it's precisely this attitude, ladies and gentlemen, that is so dangerous in scientists. The great scientists have known their limitations and have worked together with the humanities to understand the complexities of the human mind.

What you have in front of you, ladies and gentlemen, is a specimen of a new kind of scientist who is so cocksure of what he and his lab can do that he has discarded 2000 years of the insights of the humanities, and of religion, and of anything that lies outside of the scientific method. And this is highly reductive and highly dangerous.

You know, it used to be the case that people who were very religious dreamt of a New Jerusalem, a new dawn, when all the problems would be done away with through the light of reason. What these two gentlemen represent is a secularized, scientific version of that dream of building the New Jerusalem. It was dangerous then and it's dangerous now, because it breeds with it millennial fantasies of perfectionism which are very dangerous.

You know, across the border, we have the United States. It was built upon the idea of constructing heavenly Jerusalem here on earth through the use of religion. There is now, in the United States, a secularized, scientific version of this, which Steven Pinker represents.

In Canada, and in Europe and in other parts of the world, we remember older, more complex kind of heritage, where we accept that human nature cannot be made perfect. And that, in fact, the best way of improving our laws, our societies, our relationships with one another is not to go in with a bunch of statistics, assuming that all the answers lie in science.

Believe me, I am a firm believer in the wonders of science. Like everybody, I'm deeply on the side of those brave researchers who have wiped out all sorts of diseases in Africa.

But don't, ladies and gentlemen, allow this to sway you in assessing the motion. Because you can very much feel proud of what scientists have done without wishing, as this team would like us to do, to disregard all the complexities of the psyche or with no supernatural inclinations that we could call the soul, that those problems and issues remain, that we have philosophy, and art and other disciplines to deal with them, and they can stand shoulder-to-shoulder with the sciences in the hope of making life not perfect but sometimes less painful.

This is what I am arguing for, a more humane realistic version of the meaning of life. Thank you.

Matt Ridley:

“It is not the man who hopes when others despair who is regarded by a large class of persons as a sage,” said John Stuart Mill, “but the man who despairs when others hope.” In other words, we've always thought Cassandras were wise and Pollyannas were foolish.

But, history teaches us that this is the wrong way around. Cassandras were nearly always wrong, Pollyannas rarely been cheery enough, given history. The apocalypses of my youth were wrong to tell me that the world, the future was dim - glim - grim is the word I was looking for. Thank you.

And they were wrong to teach me a counsel of despair about it. But don't go away with the idea that optimists like Steve and I think the world is perfect. I have no idea where Alain got that idea. Of course, we don't think that. We think quite the reverse. We think this world is a *Veil of Tears*, a *Slough of Despond* compared with what it could be.

And will be in the future if we do the right things.

I'm not an optimist by temperament, but by evidence. That's what changes my mind. We're not saying don't worry, be happy. We're saying don't despair, be ambitious.

We're not saying everything is going to be okay. There's going to be war, and pain, and misery in the future, but there was even more in the past. And, by the way, talking about the past, I'll give Alain a little bit of Ancient Greece. Hesiod lived in the Golden Age of Greece and even he complained that things aren't what they used to be.

We've hardly started gathering the harvest of innovation that can improve people's lives in the future and heal the planet they live on. And that's what makes Steve and me different from Dr. Pangloss in Voltaire's *Candide*. Pangloss explains to Candide that the death of 70,000 people in the Lisbon earthquake must be for the best, because God made the world and he's not able to make an imperfect world, so they must have been bad

people. Voltaire was actually teasing the *Théodicée* of Leibniz and Maupertuis. Perhaps because his mistress was sleeping with Maupertuis.

: But, today, we would call Pangloss a pessimist, somebody who thinks that we really can't improve our lot, that the world is as perfect as it could be. Progress has been real, progress is real, progress has been good for the great majority of people. Progress has been particularly good for poor people.

And there's no reason to think that it's suddenly going to stop now just because we're not thinking enough about our soul or our psyche. There's every reason to think that the future is going to be bright. And I think you should vote for the motion if you think that.

Malcolm Gladwell: I wanted to talk about something that we haven't talked about nearly enough this evening, which is kind of astonishing, but maybe it's because the two esteemed gentlemen on the other side of this proposition have, essentially, spent the entire time with their hands over their ears and eyes saying, "La, la, la, la, la, la, la, la."

What I'm talking about, of course, is nuclear war. And the story that always stays with me and I think bears repeating this evening is the story of what's known as the Petrov incident. 26th of September, 1983, a time when relations between the United States and the Soviet Union were at an all-time low. Korean Air Line 007 had just been shot down by the Soviets. We were on the brink, as close as we have come, perhaps, to nuclear war in quite some time. The hawks are all lined up in Washington, Yuri Andropov in Moscow believes America is on the verge of a nuclear first strike.

And at that point, at the height of that paranoia, there is a lieutenant colonel named Stanislav Petrov in the Soviet Air Force who, one day on his computer screen, sees a report of an incoming nuclear missile coming from the United States to blow up the Soviet Union. And he knows what the protocol requires him to do, which is if America has launched a first strike, he has to retaliate in full force.

So, what did he do? Well, he decided that it was a computer malfunction and he didn't push the button. And his hesitation is the real reason that we're all here today, right? His hesitation is the reason that we're all here today.

Well, the lesson of that is obvious. That couldn't happen in the fifteenth century, as miserable as the fifteenth century was. It couldn't have happened in the sixteenth, and the seventeenth, and the eighteenth, and the

nineteenth, and the twentieth, up until 1940 or so, right? And this threat is a distinctly modern creation.

And the notion that there could be a computer malfunction that could lead us to blow ourselves up is as real today as it was thirty years ago in the Petrov incident, right?

So, I look at that and I return to the point that I made at the beginning of this debate. We have done extraordinary things over the last hundred, two hundred, three hundred years in reducing our interpersonal risks, in making progress in the everyday ways we live our lives.

Mr. Pinker gave you ten areas in which we have made that kind of progress. Matt Ridley gave you more. Everything they said is true. But, it's beside the point, right?

At the same time as we have reduced those interpersonal risks, we have increased our existential risks. And for you to vote for this proposition, you have to believe that that trade-off leaves us better off. And it doesn't.

Rudyard Griffiths: Steven.

Steven Pinker: Everyone knows that the human mind is vulnerable to illusions, biases and fallacies. Several of these mental bugs fool us into believing that the world is in decline or in existential danger and always has been.

First, we're overly impressed by memorable images and that's what the world gives us. If it bleeds, it leads. That's why we fear shark attacks and plane hijackings when what we should fear is falling down the stairs and texting while driving. Now, smartphones have made billions of people into on-the-scene reporters and the world seems to contain more shootings and explosions than ever.

Second, we confuse changes in ourselves with changes in the times. As we get older, we become more aware of follies and dangers that have been there all along. So, every generation becomes nostalgic for the good old days.

Third, everyone is a social critic. As Hobbes observed, "Competition of praise inclined to a reverence of antiquity, for men contend with living, not the dead."

Recently, the epidemiologist, Hans Rosling gave a thousand people a series of multiple-choice questions on population, literacy, life expectancy and poverty. He noted, "If for each question I wrote the alternatives on bananas and asked chimpanzees in the zoo to pick the right answers, they would have done better than the respondents." The reason was that the respondents consistently picked answers that were too pessimistic.

I got the same result in a survey about violence in the present, in the past. And this refutes the claim by Mr. Botton that people's default position is one towards optimism. The facts are exactly the opposite.

Ladies and gentlemen, you can do better than a chimpanzee. The cure for cognitive fallacies is data and the trend lines are unequivocal. On average, people are living longer, healthier, richer, safer, freer, more literate, and more peaceful lives. While past performance is no guarantee of future returns, the world is not Wall Street. We are unlikely to wake up one morning and face a world with smallpox, slave auctions, or surgery without anaesthetics.

To be sure, the world faces formidable challenges. And that brings me to my final point. Optimism is a self-fulfilling prophecy; so is pessimism. The progress we enjoy is not the result of some mysterious historical dialectic or law of inevitable progress or arc bending towards justice. It is the result of people spotting problems, including nuclear proliferation and fragility, and instead of moaning that we're all doomed, applying their ingenuity and their efforts to solving them.

A recent survey show that people who believe that our way of life will end in a century also endorse the statement, "The world's future looks grim, so we have to focus on looking after ourselves." Ladies and gentlemen, don't be among them. It's irresponsible enough to be a fatalist when the objective indicators say the world is getting worse, all the more so where they say the world is getting better.

Rudyard Griffiths: Thank you, gentlemen. Bravo.

Well, look, ladies and gentlemen, please join me - this has been a big meaty, contested debate. I just want to thank you four gentlemen. You came here prepared, you took each other on, and we're the better for it. So thank you again, gentlemen, for a fabulous debate tonight. Well done, really.

Big thank you, of course, to the Aurea Foundation, Peter and Melanie Munk for staging these events, for allowing Toronto to be the centre of this kind of civil, substantive, enriching conversation. Bravo to the Aurea Foundation. Thank you.

Now we get to find out. Is the glass half empty? Is it half full? Let's start that process by reviewing where opinion was at in this hall of 3,000 people at the start of tonight's proceedings. Twenty-seven percent of you disagreed with the resolution, seventy-three percent were in support, "Be it resolved humankind's best days lie ahead..." [ed. note: *the final confirmed tally of pre-debate votes was counted at 71% agree and 29% disagree*]

We then asked you, effectively, would you change your mind? There was a big indication here that the debate was very much in play. At its opening, ninety-one percent said that they could conceivably vote the opposite on the way out tonight.

So, each of you has a ballot with your program. There are ballot boxes outside. Vote once. And let's have our reception at 9:00 p.m. I'll announce the results in the lobby.

Again, ladies and gentlemen, thank you for coming out to the autumn *Munk Debate*. It was a terrific contest.