THE BROOKINGS INSTITUTION

FALK AUDITORIUM

THANK YOU FOR BEING LATE:
A CONVERSATION WITH THOMAS L. FRIEDMAN

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Welcome:

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Remarks:

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P R O C E E D I N G S

MR. HYMES: Good morning. My name is Victor Hymes, a member of the Brookings Board of Trustees. On behalf of the Board and the Metropolitan Policy Program I welcome you to Brookings this morning to hear from New York Times columnist and Pulitzer Prize winning journalist Thomas Friedman.

We are here to celebrate the publication of Tom's latest book, "Thank You for Being Late: An Optimist's Guide to Thriving in the World of Accelerations." In the book Tom discusses the unique moment in which we live amid exponential growth and technology and innovation, and how we should pause to appreciation and reflect upon it. Given our current political climate, this book is ever more timely.

It also is appropriate that it is the Metro Program at Brookings that is hosting Tom's book. This is because a key part of Tom's optimism comes from how his experience growing up in St. Louis Park, Minnesota, demonstrates how it is at the local level in which progress and adaptation can happen.

As he'll discuss later in the program, growing up in the small suburb of Minneapolis instilled in him the values of inclusion, optimism, and trust that have guided him ever since. This community that first welcomed the Jewish community in the 1950s and is most recently welcoming a thriving Somali community, this topsoil of trust in communities as he describes in the book is needed now more than ever.

Another theme that resonated with me and the work of the Metropolitan Program was the discussion of the necessity for the average workers to subscribe to lifelong learning and skills training to adapt to the ever-changing workforce. For me this statement is personal.

After local schools began to fail, at age 12, my parents had a plan for me to leave home and live in another community offering academic excellence. Two years

later, my father died of a massive heart attack, leaving six children. Lifelong learning and adaptation is why I believe I am standing here today. As Tom says in the book, gone are the days of actually needing a plan to fail. Now you need a plan to succeed.

Following his talk, Tom will sit for a dialogue with Brookings Vice President and Director of the Metropolitan Program Amy Liu, where they will dive deeper into these themes and take audience questions.

Now it is my honor to introduce to you today Tom Friedman. Please come to the stage, Tom. (Applause)

MR. FRIEDMAN: Thank you very much. Great to be here. Amy, thank you for organizing all of this. Thank you all for coming out on this cold and windy Minnesota morning. (Laughter)

So I'm going to talk about my new book, "Thank You for Being Late: An Optimist's Guide to Thriving in the Age of Accelerations." The first question I always get from people is wherefrom comes the title, "Thank You for Being Late?" And the title comes from having breakfast with people in Washington, D.C. And I don't like to waste breakfast eating alone if I'm downtown, so I try to arrange meetings and people I can interview. And over the years, every once in a while someone would come 10, 15 minutes late. And they'd say, Tom, really sorry, it's the weather, the traffic, the subway, the dog ate my homework. (Laughter)

And one day one of them did that, Peter Corsell, it was about three years ago, and I just spontaneously said to him, actually, Peter, thank you for being late. Because you were late I've been eavesdropping on their conversation. (Laughter) Fascinating. I've been people watching the lobby. Fantastic. And most importantly, I just connected two ideas I've been struggling with for a month, so thank you for being late.

People started to get into it. They'd say, well, why you're welcome. (Laughter) Because they understood I was actually giving them permission to pause, to slow down, to reflect.

In fact, my favorite quote in the opening chapter of the book is from my friend Dov Seidman, who says when you press the Pause button on a computer it stops. But when you press the Pause button on a human being it starts. It starts to reflect, to rethink, and to reimagine. And, boy, don't we need to be doing a lot of that right now?

Now, the book was actually triggered by actually a pause, when I paused to engage with someone who I probably wouldn't normally do. I live in Bethesda, Maryland, and as I did today I take the subway in about once a week. And almost three years ago now I did that and I drive from my home on Bradley Boulevard to the Bethesda Hyatt and I park in the public parking garage there, and I take the Red Line into Farragut Square. And I did that some three years ago now and went to work, came back on the Red Line, got in my car, time-stamped ticket, drove to the cashier's booth, gave it to the cashier, and he looked at and looked at me and said I know who you are. I said great.

He said I read your column. I said great. He said I don't always agree. I thought get me out of here. (Laughter) But I actually said that's wonderful. It means you always have to check. And I drove off.

About a week later I took my weekly subway trip in, Red Line, office, Red Line back, car, time-stamped ticket, cashier's booth, same guy's there. And this time he says, Mr. Friedman, I have my own blog. Would you read my blog?

I thought, oh, my god, the parking guy is now my competitor? (Laughter) What just happened? So I said, well, write it down for me and I'll look at it.

So he wrote it down on a piece of receipt paper, odanabi.com. And I took it home and I called it up on my computer. It turned out he was Ethiopian and wrote

about Ethiopian politics. He's from the Oromo people and obviously a real committed democracy advocate.

So I thought about him, told my wife about it. And I eventually concluded after a couple of days that this was a sign from God and I should engage this guy. I should pause. But I did not have his email, so the only way I could do that was park in the parking garage every day. (Laughter) Which I did over four or five days, I can't remember how many days it took me now.

I parked and then one morning he was there and I parked under the gate, so it couldn't come down. I knew his name. Now I said I want your email, I want to send you an email. And that night I sent him an email. I shared our email exchange in the book because some of them were funny. And I basically said to him I have a proposition for you. I will teach you how to write a column if you tell me your life story. And he answered basically I see your proposing a deal. I like this deal.

So he asked if we could meet near his office at Peet's Coffee House in Bethesda, across from the Bethesda Metro, which we arranged to do two weeks later. And I came with a six-page memo on how to write a column and he came with this life story. Short version is Ethiopian economics grad of Haile Selassie University, a real democracy activist for the Oromo people, basically got thrown out of the country for his activism and pro-democracy work; was working at the garage just to make money because he was blogging on Ethiopian web platforms, but they wouldn't turn his stuff around fast enough, he said to me. So he decided to start his own blog. And now, he said, Mr. Friedman, I feel empowered.

His Google metric said he's read in 30 countries. He's my garage -- this is my parking guy. And it's a wonderful tale of the ability of anyone to participate today in the global conversation.

Well, I then presented him with the six-page memo on how to write a column, which we went over in several other sessions and online. I explained to him that a news story is meant to inform. I can write a news story about this event this morning. But a column is meant to provoke. I explained to him that I'm either in the heating business or the lighting business. That's what I do. I'm either doing heating or lighting. Okay? I'm either stoking up an emotion in your or I'm illuminating something for you, and ideally, if I do both and produce heat and light, I really have a column. But I explained to him that to produce heat and light required a chemical reaction, that you had to combine three compounds.

The first was your value set. What is the value set of ideas you're trying to promote in the world? Are you a Communist, a capitalist, a neocon, a neoliberal, a Libertarian, a Marxist, a Keynesian? What is the value set you're pushing?

Second, how do you think the machine works? So "the machine" is my shorthand for what are the biggest forces shaping more things in more places in more ways on more days? Because as a columnist, I'm always trying to take my values and push the machine in that direction. And if you don't know how the machine works, you won't either push it at all or you won't push it in the right direction. So all my books, to some degree, are an argument about how the machine is working, how the gears and pulleys of the world work.

And lastly, what have you learned about people and culture? Because there's no column without people and there are no people without culture. How does the machine affect different people and culture and how do different people and culture affect the machine?

Stir those together, let it rise, bake for 45 minutes, and if you do it right you'll produce a column that produces heat or light. And you will know by the reactions

you get because some readers may say, ah, I didn't know that. That's a good reaction. Some may say I never looked at it that way. That's a good reaction. Some may say I never connected those things. That's a great reaction. Your favorite, you live for this, happens four times a year: You said exactly what I felt, but didn't know how to say. God bless you, God bless you.

I want to kill you dead, you and all your offspring. That's a reaction you'll also get. (Laughter) That will tell you you've produce heat or light.

No, the more I engage with Ayele on this, the more I started to say to myself, well, if that's what a column's about, what's my value set? How do I think the machine works today? And what have I learned all these years about people and culture? And I decided that was the book I wanted to write.

And so those of you who read my column know that I'm not exactly a liberal, I'm certainly not a conservative, because my politics, my value set, actually does not emerge from a library or a philosopher. It actually grew out of the time and place in Minnesota where I grew up because I grew up in a time and place where politics worked, and that has really informed how I write about the world.

How do I think the machine works? What have I learned about people and culture? I decided to throw that all together and that is the spine of this book. So let me go through the different parts very quickly.

The first part is basically how the machine works. And my argument is that what is shaping more things and more places in more ways on more days today is that we are in the middle of three exponential accelerations all at the same time with the three largest forces on the planet, which I call the market, Mother Nature, and Moore's Law.

So the market for me is what I call digital globalization. Not your

grandfather's globalization, containers on ships, that's actually going down, but the way everything now is being digitized and globalized, whether it's through Twitter or Facebook or MOOCs or PayPal. That's what's taking the world from interconnected to hyperconnected to interdependent.

Second, Mother Nature. That's climate change, biodiversity loss, and population growth. If you put the market, digital globalization on a graph, it looks like a hockey stick. If you put climate change, biodiversity loss, and population on a graph today, it looks like a hockey stick.

And lastly, the über driver of them all is Moore's Law. Coined by Gordon Moore in 1965, the co-founder of Intel, Gordon Moore argued that the speed and power of microchips will double roughly every 24 months. If you put it on a graph, it looks like a hockey stick. And the three are all intertwined. More Moore's Law, which is just a proxy for technology generally, drives more globalization; more globalization drives more climate change or more solutions to climate change.

So these three giant accelerations, I argue, aren't just changing the world, they are fundamentally reshaping the world. And they're reshaping five realms in particular: politics, geopolitics, the workplace, ethics, and community. So the first part of the book is about the accelerations and the second half is about these five realms and how they have to be reimagined in the age of acceleration and how I see that.

So I'm just going to talk about the first acceleration, the one in Moore's Law. So that chapter is called "What the Hell Happened in 2007?" 2007. It sounds like such an innocuous year, 2007. What's this guy talking about?

Well, here's what happened in 2007. The year was kicked off by Steve Jobs at the Moscone Center in San Francisco when he unveiled the first iPhone, the 2G phone, beginning a process by which we are now putting into the hands of -- we're on our

way to everyone on the planet a handheld computer connected to the Internet.

And in 2007, actually late 2006, a company called Facebook opened its platform to anyone with a registered email address and broke out of high schools and universities, and in 2007, went global. In 2007, a company called Twitter, which was founded in 2006, also split off on its own independent platform and went global.

In 2007, the most important software platform you've never heard of called Hadoop, named after the founder's son's toy elephant, opened its door and set its algorithm into the wild. And Hadoop's algorithm is what enabled a million computers to work together as if they were one computer, and it gave us really the foundation of big data. Actually Google gave us the foundation of big data, but it did so in a proprietary way. But as Doug Cutting, the founder of Hadoop says, Google lives in the future and sends us letters back home. And what Google did was leave breadcrumbs of algorithms for the open source community to reverse engineer what Google had done, and that's what Hadoop did and basically gave that capability to everybody.

In 2007, the second most important software program you've never heard of called GitHub opened its doors. GitHub today is the largest repository of open source software. It has over 14 million users. It had 11 million when I started the book.

2007, a company called Google launched an open source operating system called Android. In 2007, this same company called Google bought an obscure TV company called YouTube.

In 2007, Jeff Bezos over at Amazon.com gave us the world's first e-book reader, the Kindle. In 2007, IBM launched the world's first cognitive computer called Watson.

In 2007, three design students in San Francisco who were attending the World Design Conference that year decided to rent out their three spare air mattresses to

people who couldn't get a hotel room. And it worked out so well for them in 2007 they started Airbnb.

In 2007, a company called VMware was launched. And it had an algorithm to basically use software to virtualize servers and vastly expand the capability of that hardware by just using software.

In 2007, AT&T, which was the first service provider for the iPhone, when the iPhone was launched Steve Jobs did not want any apps on it. He thought I don't want any apps cluttering this phone. And that was fine with AT&T, so even though they sold a lot of iPhones, AT&T could handle the capacity. And a year later, Steve Jobs changed his mind and opened the App Store. And the demand on AT&T's network over the next six years grew 100,000 percent. Have you ever seen anything that grew 100,000 percent? And to absorb that capacity AT&T virtualized its networks, basically its switches and, again, used software to vastly expand their hardware and accommodate a growth of 100,000 percent, which began in 2007.

Here's what else happened in 2007. This is a graph of sequencing the human genome. Cost, in 2001, it was $100 million. By 2005 or so, it falls to $10 million. And then you'll notice it goes over a waterfall. If you trace your finger down to the year, it's 2007. Isn't that interesting.

This is the growth of solar power. It begins to take off in 2007. Also, in 2007, a process for extracting natural gas from tight shale called fracking began.

This is a graphic picture of social networks. The white line at the top that goes straight down in 2007, that is the cost of generating a megabit of data. Facebook, Twitter, all those things, those are massive megabits of data. You'll notice in 2007, it goes straight down.

The blue line going up is the speed at which you can transmit this data.

This is a graphic picture of social networking. The two lines cross there in 2008. Close enough for government work. (Laughter)

That's what Moore's Law looks like. That's the power of an exponential. One of the hardest things for the human mind to grasp, which is what we're in the middle of, is the power of an exponential. In fact, Intel's engineers back in right around -- actually it was a couple years ago, to demonstrate the power of Moore's Law they said what if we took a 1971 VW Beetle and what if it improved at the same rate of our microchips? So their engineers on the back of an envelope calculated that if the 1971 VW Beetle improved at the same rate of microchips on Moore's Law, today it would go 300,000 miles per hour, it would get 2 million miles per gallon, and it would cost 4 cents. (Laughter) And you'd be able to drive it your entire life on one tank of gas. That's the power of something doubling, doubling, and doubling. And we now are in the middle of the really big doubling.

This is -- oh, I forgot, what else started in 2007? This is a graph of Cloud computing. Let's see, the first year it shows up is 2008. That means it started in 2007. And in 2007, of course, Intel for the first time went off silicon to extend the exponential of Moore's Law. It introduced non-silicon materials into its transistors, which turned out to be a huge, huge accelerator.

It turns out 2007 may in time be understood as the single greatest technological inflection point since Guttenberg invented the printing press. And we completely missed it because of 2008.

So right when our physical technologies suddenly just leapt ahead, like we were on a moving sidewalk at an airport that went from 5 miles an hour to 35 miles an hour, like overnight, and we all felt the ground moving beneath our feet, right when that happened, all our what Eric Beinhocker calls our social technologies -- the regulating, the

deregulating, the political reform, the economic reform, the management, the learning you needed to get the most out of this acceleration and cushion the worst -- a lot of that just froze. And we're living in that dislocation right now.

So I was out at Google X talking about this with Astro Teller. Astro Teller is chief astronaut at Google X, their research lab. So Astro went over to his whiteboard and drew this abstraction. That blue line across the middle, he said, is the average rate at which human beings in societies adapt to change over time, so it has a positive slope, but is very gradual. The white line we'll call technology or Moore's Law. So if you were at the left end of this line, if you were in the 11th century or the 12th century, your life basically didn't change over a century. We forget, there were times where life did not change over an entire century. And then we got Copernicus and Galileo and da Vinci and eventually Gordon Moore and Intel, and the line goes straight north.

And then Astro drew a little diamond there and he wrote the words, "We are here." That is, we're now at a place where the change and the pace of change now, because of the constant doubling, is faster than the average human being and society can adapt to. Then he added, got another magic marker out and he added that dotted line. And he wrote, "Learning faster and governing smarter." How do we lift the adaptation line to meet technology where it is? And that's the essential challenge that we face today.

How did all this happen? Basically what produced 2007 is the fact that your computer has essentially five parts. It has the CPU, the processor, the Moore's Law microchip, but it also has a storage chip. It has networking, it has software, and it has a sensor. Just has a camera, but sensors are going everywhere now. The fact is all five have been under Moore's Law and accelerating. And in 2007, they all melded into this thing we call "the Cloud." The Cloud. But I refuse to use the word "the Cloud" in my book

because it sounds so fluffy. (Laughter) It sounds so soft, so cuddly. It sounds like a Joni Mitchell song, "I've looked at clouds from both sides now." (Laughter)

This ain't no cloud, folks. This is a supernova. A supernova is the largest force in nature. It's the explosion of a star. And what we're in the middle now, what is driving everything now is an ever larger supernova explosion. This is the energy source that now is driving everything.

Where did you want to build you town in the Middle Ages? If the Metropolitan division of Brookings existed in 1500, what advice would Amy be giving people? She'd say build your town on a river because it'll give you transportation, it'll give you energy, it'll give you ideas, and it'll give you nourishment. You wanted to build your town on the Amazon. Where do you want to build your town today? On Amazon.com. (Laughter) Okay. You want to build it on the supernova. You want to build it on the flows coming out of the supernova because they are really now the energy source driving everything.

So what this supernova has done is basically change four kinds of power very quickly. It's changed the power of one. Wow, what one person can do now has been super empowered. We have a president-elect who can sit in his penthouse and Tweet to hundreds of millions of people in his pajamas, okay, any hours of the day, and they will receive that message unfiltered by *The New York Times* or anybody else, unmediated. But that's not what's really cool, cool in inverted comments. The head of ISIS can do the same thing from Raqqa Province. The power of one has just exploded.

The power of machines has exploded. Machines now have all five senses. They can now think. I spoke at IBM's Watson Developer Conference last month. And the day before I got there, they told me that Watson had just co-written with Alex da Kid a song that in 48 hours went to number 4 on iTunes.

In fact, I would say February 14, 2011, that was pretty much an important day in history. And it happened, of all places, on a game show. There were three contestants; two were the all-time *Jeopardy* champions and the third just went by his last name, Watson. Mr. Watson passed on the first question. But on the second question he buzzed in before the two humans and the question was, it's worn on the foot of a horse and used by a dealer in a casino. And in under 2.5 seconds Mr. Watson said in perfect *Jeopardy* language, what is shoe? What is shoe? And for the first time we saw a cognitive computer figure out a pun faster than two human beings. The world kind of hasn't been the same since.

You know, someone was around when Guttenberg invented the printing press. And some monk probably did say to some priest, now that is really cool. (Laughter) I don't have to write these Bibles out longhand anymore? We just stamp these out? Okay. Well, I kind of think you're here for a similar moment. Okay?

So these accelerations, they're not just changing the world, they're reshaping the world. And they're reshaping these five realms that I talked about, and that's the second half of the book. They're reshaping politics, geopolitics, ethics, the workplace, and community. So let me just talk a little bit about a few of them.

How are they shaping the workplace? Well, that chapter in my book is called, "How We Turn AI into IA." How do we take artificial intelligence and turn it into intelligent assistance -- A-N-C-E -- intelligent assistants -- A-N-T-S -- and intelligent algorithms so more people can live above the line and thrive in an age of acceleration?

So my example of intelligent assistance is the HR policy today of AT&T. A giant company, 360,000 employees, living on the age of the supernova, feels its heat every morning, competes with Verizon, T-Mobile, Sprint. There's a good chance what AT&T is doing in its HR department is going to come to a neighborhood near you. Well,

here's AT&T's HR policies in a nutshell.

They begin the year with their CEO Randall Stephenson giving a radically transparent speech about where the company's going, how they see their business environment, and what skills you need to be a worker at AT&T. That filters down throughout the company.

Then they put every employee on their own in-house LinkedIn system, so they know just what skills you have and how they match up with where the company is going. And then they've got Amy Liu. And if there are 10 different skill sets you need to be a successful work at AT&T, they come to Amy and say, Amy, you're doing well, you've got 7 of them. You're doing well, but you're missing three.

Then they partnered with Sebastian Thrun, the founder of Udacity, and got him to develop nanodegrees for all 10. Then they came to Amy and said, Amy, here's the deal. We will give you up to $8,500 a year to take these courses for the skill sets you're missing, and we will pay for that. But there's just one catch. You have to take them on your own time. You have to take them on your own time. By the way, one of these courses is a one-year online computer science master's degree from Georgia Tech for $6,000.

Now, if Amy says, you know what, I've actually climbed up one too many telephone poles. I'm not up for this. They now have a wonderful severance package for Amy, but Amy's not going to be working much longer for AT&T.

What is AT&T saying to its workers? What is the new social contract? Their contract is with Amy. If she takes those courses, they will make sure she gets offered the new jobs first inside, that they don't go outside. But their message is you can now be a lifelong employee at AT&T, but only if you're a lifelong learner. You can be a lifelong employee, but only if you're a lifelong learner. That is the social contract coming

to a neighborhood near you.

And as I describe it in the book there are three new social contracts here. The employer, I think, has an obligation to create the learning opportunities and the resources for employees to do it. Amy has a new obligation. If she wants to work there, she has to have a different social contract with herself. I've got to take these courses on my own time. I've got to be a lifelong learner. And I think government's job is to nurture and inspire all of these kinds of social contracts for the workers of the 21st century.

Intelligent assistant, my example of that is Qualcomm, another really important company you probably haven't focused on much. It made the inside of your cell phone. Apple actually didn't make that. The software and motherboard of your cell phone was most likely made by Qualcomm and their founder, Irwin Jacobs. And I tell Irwin's story actually in the book early on.

So Qualcomm has a 64-building campus in San Diego. And two years ago, they put sensors on six of their buildings as a beta test. And they put sensors on everything, every toilet, every faucet, every window, every door, every light bulb, every computer, every refrigerator. They know everything going on in those buildings. And then they beamed all that data up to the supernova and then they beamed it down onto iPads with a very friendly user interface for their janitors. And they can now swipe down, if Amy leaves her computer on, they know. If a pipe bursts outside her office, they know immediately. They swipe down how to fix it, who to call, the repair manual is there.

Their janitors now have an intelligent assistant. Their janitors are now maintenance technologists. Their janitors now give tours to foreign visitors. Think what that does for the dignity of a janitor, that they now have an intelligent assistant helping them live above the line.

Lastly, intelligent algorithm. That's the partnership between Khan

Academy and the College Board, the people who administer the PSAT and SAT exams.

So I'm a neurotic suburban parent and like many others, my kids went to public school out in Bethesda. And when they were in 11th grade and had to take the PSAT and SAT a year later, we went out and hired a tutor for $200 an hour to goose up their English and math scores. Don't worry, I know most of you did it, as well. It's okay. (Laughter) A completely rigged game. A completely rigged game because if you had the resources, you could do this. And if you came a disadvantaged family or neighborhood you probably didn't even know the possibility was there. But even if you did, you couldn't afford it. A completely rigged game.

So over two years ago now, the College Board and Sal Khan, the founder of Khan Academy, the online learning platform, created free SAT and PSAT college prep. Now what happens is Amy takes the PSAT in 11th grade, and she gets her results back and they say, Amy, Amy, Amy, you did well. You really did well. But you have a problem with fractions and right angles. The site then takes Amy to a practice site just for fractions and right angles, dedicated specifically and only to her weaknesses. They don't waste time on her strengths.

If Amy does well, it takes her to another site that says, Amy, have you ever heard of AP Math? Believe it or not, a lot of kids haven't. There's no one in their world who has taken AP Math. You could take AP Math in 12th grade.

And that takes her to another site that's got 180, probably more now, college scholarships. And then it takes her to another site that offers her coaching from volunteers from the Boys and Girls Clubs of America. That's an intelligent algorithm. Last year 2 million kids in America participated in free SAT and PSAT college prep through that intelligent algorithm.

Now, you would know nothing about any of these things if you had

followed our last election campaign. You would know nothing about that. Bernie Sanders' big idea was to tear down the banks. Do you think that was going to lift anybody up the line? Donald Trump's big idea was to tear down Hillary Clinton. And Hillary Clinton's big idea was to direct you to her website. (Laughter) But no one was telling people what's actually going on inside communities and companies all over America and its massive social entrepreneurship on the education-to-work pipeline.

And what I've just given you are three examples. I've got so many more in that chapter. It'll blow your socks off the amount of social entrepreneurship, the number of people with their thinking caps on trying to work this problem. So that's who we turn AI into IA.

My chapter on politics is called "Mother Nature's Political Party." And I call it that because I don't think we're just in the middle of one climate change right now, change in the climate. I think we're in the middle of three climate changes at once. We're in the middle of change in the climate of the climate. We're in the middle of change in the climate of politics -- of technology, excuse me. and we're in the middle of change in the climate of globalization. We're in the middle of three fundamental climate changes at once.

What do you want when the climate changes? You want two things. You want resilience. You want to be able to take a blow. And you want propulsion. You want to be able to move ahead. You don't want to just be curled up in a ball.

So I thought, well, who do I interview about how you produce resilience and propulsion when the climate changes? And then I realized I know a woman, she's 3.8 billion years old, and her name's Mother Nature, and she's dealt with more climate changes than anybody. So why don't I call her and we'll do an interview?

So I called Mother Nature, I sat her down, and I said, Mother Nature,

how do you produce resilience and propulsion when the climate changes? And she said, well, Tom, first of all, everything I do, I do unconsciously, I have to tell you. But first of all, she said, I'm incredibly adaptive in a brutal way through natural selection. But in my world only the adaptive survive.

Secondly, she said, I just love pluralism. She said, I love diversity. My most diverse ecosystems are my most resilient ecosystems. I like to try 20 different species, see what happens.

Third, she says, I'm incredibly sustainable in a very circular way. Everything is food. Eat food, poop seed, eat food, poop seed. Nothing is wasted in my world.

Fourth, she said, I'm incredibly entrepreneurial. Wherever I see an opening, I fill it with a plant or animal perfectly adapted to that niche. I'm incredibly entrepreneurial.

First, she said, I'm incredibly heterodox. I mix all kinds of things together. I think things are most strong when they co-evolve. I put the right bees with the right flowers. I put the right trees with the right soils. I'm incredibly, incredibly heterodox.

Lastly, she said, I do believe in the laws of bankruptcy. I kill all my failures. I return them to the great manufacturer in the sky and I take their energy to nourish my successes.

So my argument is that the political party, the community, the company, the country that most closely mirrors Mother Nature's strategies for building resilience and propulsion in the age of acceleration will be the one that's most sustainable.

And then just for the fun of it I thought what would happen, what would it look like if Mother Nature was running in this election and Mother Nature had a political party? And I produced her 18-point platform for building resilience and propulsion in the

age of acceleration. I won't go into it, it's in the book, but it's just a proxy really for my politics. And you will see when you look it over that on some issues I'm actually to the left of Bernie Sanders. I think we should have single-payer healthcare. If Sweden can do it and Singapore can do it, I fail to understand why we can't do it. And on other issues I'm actually to the right of the *Wall Street Journal* editorial page because I believe we should abolish all corporate taxes and replace them with a carbon tax, a tax on sugar, a tax on bullets, and a small financial transaction tax. I think we should get radically entrepreneurial over here in order to pay for the safety nets and trampolines we're going to need over here because the age of acceleration's going to just be too damn fast for more people.

Now, the idea of co-evolving safety nets and radical entrepreneurialism simply is impossible in our two-party system. If you're for safety nets, you're never for radical entrepreneurialism. If you're for radical entrepreneurialism, you're never for safety nets. Although one thing you have to give Trump credit for, he actually is an agent of disruption of this model and I think he's just the beginning because I think all these political parties are going to blow up. And for my money, they can't go fast enough. (Laughter)

And I'm not just talking about ours, I think all across the industrial world because these parties were designed to answer different and older questions. They were designed to answer questions of the New Deal, the Industrial Revolution, the early IT revolution, and civil rights both racial and gender. And I think the question you have to answer today as a political party is how you respond to these three accelerations, how you get the most out of them, and how you cushion the worst.

Let me conclude by talking about a chapter in the book that might surprise you, which is why ethics have to be completely rethought in the age of

acceleration. The chapter's called, "Is God in Cyberspace?," which comes from actually the best question I ever got on a book tour. I was, 1999, selling "Lexus and the Olive Tree," in Portland, Oregon, a man stands up in the balcony at question time and says, Mr. Friedman, I have a question. Is God in cyberspace? And I thought uh, uh, uh, I have no idea. Never been asked that before. I was really embarrassed.

I went home, called my spiritual teacher. His name is Rabbi Tzvi Marx. I got to know him when I was The New York Times correspondent in Jerusalem, at the Hartman Institute. He lives in Amsterdam, married to a Dutch priest, very interesting guy. I called him in Amsterdam. I said, Tzvi, I got a question I've never had before. Is God in cyberspace? What should I have answered?

And he said, well, Tom, in our faith tradition we have two concepts of the Almighty: a biblical and a post-biblical view. The biblical view is the Almighty is almighty. He smites evil and rewards good. And if that's your view of God, he sure isn't in cyberspace, which is full of pornography, gambling, cheating, lying, prevarication, and now we know fake news. Okay? (Laughter) But, he said, fortunately, we have a post-biblical view of God that says God manifests himself by how we behave. So if we want God to be in cyberspace, we have to bring him there by how we behave there.

Well, I took his answer, I put it into the paperback edition of *Lexus and the Olive Tree*, where nobody saw it. And I basically forgot about it.

Twenty years later, I'm working on this book and suddenly I start retelling that story to people. And I say to myself why are you retelling that story? And then it became immediately obvious to me: because everything's moving to cyberspace. That's now where we date, where we find a spouse, where we meet our friends, where we do our business, where we educate. What does that mean? It means our lives are migrating to a realm where we're all connected, but nobody's in charge. Our lives are

moving to a realm where we're all connected, but nobody is in charge and, boy, didn't we see that in this election, which I think is a tipping point in our awareness of what's happened. We got hacked by another country. Who do I call? 911, Putin hacked me. Okay? (Laughter)

Fake news, who do I call, you know? 911, who do I call in cyberspace? We're all connected. We're living our lives now in a realm we're all connected and nobody's in charge. It's not like here if you run a red light.

So the question of ethics now becomes really important because when you combine that with this amplified individual power in an interdependent world, this can get really scary. You see, friends, we're now standing at a moral intersection we have never stood at before as a human species.

In 1945, we entered a world where one country could kill all of us. If it had to be one country, post Hiroshima, I'm glad it was ours. I think we're heading for a world with these accelerations where one person can kill all of us, and all of us could actually fix everything. We have actually never been to this intersection before where one of us could kill all of us and, if we put our minds to it, all of us could feed, house, clothe, and educate now with these amplified powers everyone on the planet. We have never been at a place where one of us could kill all of us and all of us could fix everything.

What does that mean? It means we've never been more god-like as a species. And if we are going to be god-like, oh, we all better have the Golden Rule. Every faith has their version of it. Do unto others as you wish them to do unto you.

I know what you're thinking. You see, I gave this talk as the commencement address at Olin College of Engineering last May. And I said to the parents there I know what you're thinking. You paid 200 grand so your kid could get an

engineering degree, and they brought in a knucklehead commencement speaker who's advocating the Golden Rule. (Laughter) Could there be anything more naïve?

And I'm here to tell you that naiveté is the new realism. Oh, baby, you want to know what's really naïve? Really naïve is thinking we're all just going to be fine if everyone doesn't get the Golden Rule.

So where does the Golden Rule come from? Where do you learn to do unto others as you wish them to do unto you? It comes from two places, in my view. It comes from strong families and healthy communities. That's where you really learn the Golden Rule.

Now, I'm not an expert on strong families. Hopefully, I built one, but I would never presume to lecture anyone on that subject. But I am an expert on healthy communities because I grew up in one. And that's why the book ends with the story of my little town/suburb in Minneapolis called St. Louis Park.

So the short story is that in Minneapolis in the '30s and '40s, Minneapolis was the capital of anti-Semitism in America in the '30s and '40s. My parents couldn't join AAA among other discriminatory practices until Hubert Humphrey became mayor and he cleaned up the city government, a real hero in our household, he and Fritz Mondale.

In the '30s, '40s, and '50s, the Jews in Minnesota, most of them lived in a ghetto with African Americans in the north side of Minneapolis called the North Side. And after the war, the world opens up a little bit and the Jews are able to get out of the ghetto. And in a three-year period they all leave for one suburb, St. Louis Park, which is the one that didn't have either restrictive covenants and had enough housing stock in order to take all these people. So overnight, a town that was 100 percent white, Protestant, Catholic, Scandinavian becomes 20 percent Jewish, 80 percent white, Protestant, Catholic, Scandinavian. If Sweden and Israel had a baby, it would be St. Louis Park.

Okay? (Laughter)

And what happened was an incredible experiment in inclusion. These neurotic Jews shot out of the ghetto basically mixing with these very decent pluralistic Scandinavians and I tell the story of how they did it. And there were ups and downs and there were broken friendships and broken dates and broken hearts, but there was also an enormous amount of bridge-building. And we the Jews of Minnesota, who called ourselves "the frozen chosen" -- (Laughter) -- found our way with these really decent Swedes to build a remarkable community.

I went to high school or Hebrew school or grew up in the same time and town with the Coen brothers, Al Franken, Norm Ornstein, Michael Sandel, Sharon Isbin the guitarist, Peggy Orenstein, Alan Wiseman. Look it up on your Wikipedia page. This was not a neighborhood in the west side of New York. This was a one high school town in Minnesota. It shot us all like a cannon out into the world, all with a real sense of the importance of civic engagement, which we each expressed in different ways. The Coen brothers' movie *A Serious Man* was about our town and our Hebrew school basically.

So I tell that story. And the last chapter is I come back 40 years later. I left Minnesota in 1971 to discover the world and I come back 40 years later and find that the world has discovered St. Louis Park. Now my high school's 50 percent white, Protestant, Catholic Scandinavian, it's 10 percent Jewish, 10 percent Hispanic, and now 30 percent Somali and African American. The same suburb that was ready to take the Jews, took the Somalis.

Now the inclusion challenge, much harder. Both racially and religiously the divides that have to be bridged to build citizens in the community, much deeper. And I tell the story about how they're doing. And they're doing actually remarkably well. *The Washington Post* rates my high school, St. Louis Park High, today as, I've forgotten, it's

in the book, but the fifth or sixth best high school in the state of Minnesota with a completely different demographic.

And I basically explain how this happened and a big part of the story is leadership. If you visit St. Louis Park, you will notice, and Amy's been there, it's completely indistinguishable from all the other suburbs. There is no moat around it. There's no drawbridge. There's no wall. And yet, its culture is radically different from every suburb around it. And the reason is leadership. It was blessed with amazing leaders back in the '50s, and they passed on a leadership and inclusion culture and they just kept passing it down until today where only 15 percent of the families in that community now have kids in the public school and every bond issue for raising taxes for public education passes 70-30 or 80-20.

So what do I see there? And it's part of a larger story that Amy and I will talk about. If you want to be an optimist today in America, stand on your head because the country looks so much better from the bottom up than from the top down. Okay? (Laughter) And what you see are healthy communities all over this country trying to get it right. We also have a lot of unhealthy communities. I have no illusions about this, but there are many more success stories than you would realize.

And these success stories are built -- my friend Amory Lovins, the physicist, who was my tutor for all the biology in this book, and there's a lot of biology, Amory likes to say when he's asked are you an optimist or a pessimist, Amory say I'm neither because they're just two different forms of fatalism. Everything's going to be great. Everything's going to be awful.

Amory says, I believe in applied hope. And I love that phrase because what I see in Minneapolis in my own little town, man, I don't know if they're going to make it, I really don't know, but I see a lot of people applying hope. I see big problems, but I

see a lot of people who want to get caught trying to fix things. And that's the source of the optimism in the title of this book.

So let me end with the book's theme song. My book has a theme song. I explored could I buy this so when you opened the book it would play this song like a Hallmark card plays "Happy Birthday." And the song is called "The Eye," E-Y-E. It's by one of my favorite singers, Brandi Carlile, great country folk singer. And the main refrain is, "I wrapped your love around me like a chain, but I never was afraid that it would die. You can dance in a hurricane, but only if you're standing in the eye."

You see, I think what we're being asked to do today, friends, is dance in a hurricane, my three accelerations. We have leaders today who are advocating that we build a wall against these winds of change. My argument is you have to build an eye, an eye that moves with the storm, draws energy from it, but creates a platform of dynamic stability within it -- that's the healthy community -- where more people can feel connected, protected, and respected. I think the great struggle in our politics in the next four years is going to be between the wall people and the eye people. And my book is a manifesto for the eye people.

Thank you very much. (Applause)

MS. LIU: Wow. First of all, Tom, congratulations on the book.

MR. FRIEDMAN: Thank you. I will be signing books afterwards.

MS. LIU: Yes.

MR. FRIEDMAN: Did I mention that?

MS. LIU: I will reinforce that again. One of the things that I -- I think what you just got, you just witnessed, and what you'll get when you read the book, and I would highly encourage you to read the book, is that Tom just essentially explained the world in one hour, and it's a very complicated world, and it makes so much sense. And

so for me, that's part of the optimism because I think right now there's a lot of desire not only in the United States, but around the world to really understand what's happening.

MR. FRIEDMAN: Yeah.

MS. LIU: And, you know, there's no doubt, as Victor said at the top of the hour, that one of the reasons why we are so honored to be hosting Tom is because our program looks at the world from our head down. As much as we are based here in Washington, I think our program is very optimistic about the world because of the work that we do in our cities and in our local communities. There is so much energy, there's so much problem-solving that I think that even in this post-election environment, just listening to you now, there is a sense of disconnect, right, or fear that we may be going backwards when everyone else is trying to grapple with the future.

So I'm going to ask Tom a couple of questions and then we will have time for audience engagement. But, you know, Tom and I had sort of an email exchange right after the election briefly, if you remember. And I said, you know, now that you've written the book, just explain what happened, you know. And he said, read the book and you'll understand what happened in this election.

So why don't you tell everyone in your own words, given your vision of the machine, why did we have the outcome that we had?

MR. FRIEDMAN: Well, you know --

MS. LIU: Either here or in Europe.

MR. FRIEDMAN: Yeah. Well, again, Amy, thanks for having me. This is a great opportunity.

I basically think, if I were to reduce it to its simplest, I think that this election for me was a cultural event. Whenever I see a big surprise like this my explanation always reverts to culture and not economics. So if you think these

accelerations and what's been happening, and I didn't predict this outcome, but I didn't not predict it either. That is, I was really worried all the time. My last column I did was addressed to Trump voters and the basic theme was I know where you're coming from. And I know that for some of you living outside these big, urban metropolitan areas you now go to the grocery store and there's someone there who speaks a different language and they may be wearing a head covering that doesn't look like a baseball cap. Okay?

I know some of you, and you go now into a restroom and there may be someone of a different gender there. I personally celebrate that because I think there are a lot of people who didn't feel at home in another way, so I'm glad for that. But I understand that change, too, may have come really fast for some people. Not fast enough for me, but for some people very fast.

Then you go to your office and you sit down and they've just rolled up a robot and he seems to be studying your job. And so if you think about the two things that anchor people in the world, where they live and where they work, both have been really destabilized for a lot of people. And I think that's really what has unnerved and produced this incredible backlash, both around Brexit, that in Europe, you know, I was in London this summer and I really was struck that the only two English people I met was the person at the airport who stamped my passport and the cab driver in London. And everybody else seemed to be from Moldova.

I love playing the game, like where are you from? Guess the accent. It was wonderful for me. But I can understand why this wave of immigration overwhelms some people who don't have the tools to live at that higher of change.

And, at the same time, the way the workplace now is being revolutionized, that when you tell people who thought getting a four-year B.A. that they could dine out on that for 30 years, and then you suddenly come and you say this is a

story of lifelong learning now and what are you doing after work, some people really push back on that. And so I tell people I'm an old fuddy-duddy, I'm 63, so when I graduated from college I got to find a job. But my girls who are in their late 20s and early 30s, they have to invent a job. That's the difference between me and my kids. I got to find a job, they have to invent a job. Oh, they were lucky they found their first job, but to stay in this job I've watched how much they've invented and reinvented themselves multiple times just in the last few years.

So that's actually -- if you're in your 50s, again, you've climbed up one too many telephone poles, that's kind of hard for some people, and I sympathize with that. I'm not indifferent to that.

And so a guy comes along and says I'm going to -- the most important word on Trump's hat, other people have pointed this out, was the word "again." You know, I mean, they want something again. And that "again" is not coming around; they will soon discover that.

And so that, I think, is what is really roiling. When your workplace and your community are roiled, the two anchors of your identity, at the same time, that can produce really aberrant political behaviors.

MS. LIU: I think that you'll hear more from this program about what we're going to do next, but a lot of us have been thinking about how we help our cities, our citizens, our leaders in cities and metropolitan areas around the country manage change and do so faster. And so reading Tom's book it was really validating that change is a-comin' and it's coming faster than you think. And I'm not sure even our institutions, whether it's our federal policies or even our local institutions or organizations, are adapting fast enough. And so our job, at least at Brookings, is going to continue to work with our local leaders and civic leaders and philanthropy to make sure we are helping

people above that line and adjust to those changes.

So I want to ask you a couple of questions that go deeper about these adjustments. Because I think this is really important to understand and it's hard work actually. So let's talk about globalization and your version of what you call digital globalization.

There's a line in your book where you say, you know, it's really time to build floors, not walls. And yet, we just had an election, it was all about walls. So what does it mean either at the national level or the local level to build a floor?

MR. FRIEDMAN: Well, those are all good points, Amy, you made before, so let me pick up on those and then try to answer that.

MS. LIU: Yeah, yeah.

MR. FRIEDMAN: Because what the book basically argues at the end is that the proper governing unit in the 21st century will not be the nation state, the national government. We still need it for national security, for central banking, but it's simply too slow. And in our system, when you have this political paralysis that we've got, it's doubly slow. So it simply can't keep up with these accelerations.

Also, as a learning institution it's too slow. I can tell you in working on this book I had an experience I've never had before on any book I've ever written. I felt like I had a butterfly net and I was chasing a butterfly, and every time I got close it moved. So I had to interview Brian Krzanich, the head of Intel, three different times in the course of writing the book just to make sure nothing had changed on Moore's Law. I was exchanging paragraphs with Doug Cutting, the founder of Hadoop, till absolutely 5 to midnight of closing the book. So this stuff is changing so fast and all I've been doing for the last three years is trying to study it and understand it. I can't imagine if you're a national political figure and basically you're going from fundraiser to fundraiser you've

been doing much learning the last three years. (Laughter) Well, if you haven't, I can assure you there's a few things you've missed. So the national level, I don't think, is the right governing unit.

The single family at the other end is way too frail against these winds of change, and we have way too many single-parent families. So what I argue in the book is that precisely what Amy's working on, the city, the healthy community is actually the proper governing unit. It's close enough to people to feel their pain and understand their needs. It's apolitical enough to actually get things done and it's adaptable enough to actually get things done. And I think power, therefore, is necessarily going to evolve to the healthy cities.

I was just home in my hometown and Minneapolis has 2.9 percent unemployment. I mean, they just have a dramatic work shortage. And by the way, this is, in a very upfront way, this is driving their inclusion efforts because Minneapolis public schools today are 68 percent non-white and St. Paul's are 78 percent non-white. So if you think they're going to have a -- they're saying to themselves, we can't possibly have a 21st century workforce if we don't overcome these cultural barriers, racial and religious, where people are feeling not included and left behind. And so that's a central part of their effort.

Now, I tell the story, in Minneapolis, has a remarkable institution called the Itasca Project, and this is truly unique. St. Louis Park and Minneapolis have two really unique institutions, so if you haven't read about Itasca, drop everything and read it.

Because in the '50s, Minnesota had an incredibly civic-minded elite basically. They were the Dayton families who started Target and the McKnight's who started 3M and the Cargills and the Pillsburys, and these were all Minnesota companies. And these families actually used to vacation together in northern Minnesota on Lake

Itasca. And they would come down at the end of the summer and they'd basically tell the state how to work, you know. But in a very progressive way they mandated that every Minneapolis-St. Paul corporation had to give 5 percent top line to the community, and that's why Minneapolis has all these incredible civic institutions, and St. Paul. They invented corporate social responsibility basically. So that's how we got the Tyrone Guthrie Theater and the amazing Walker Arts Center and just so many other really public goods.

So Minnesota went through a bad patch in the '90s and 2000s. We had Donald Trump before there was Donald Trump. He was called Jesse Ventura. Okay? (Laughter) And after that little experiment with a TV personality, the leadership of the state got together -- because Minneapolis-St. Paul have 19 Fortune 500 companies, and they have a real problem because they get these companies to come there and then they never want to leave, and so this is a recruitment problem just I getting people to come to the frozen tundra, but it's also now becoming a housing problem. So their leaders got together with the philanthropic community -- and they do have an amazing philanthropic community because things like the McKnight Foundation now, the Bush Foundation, they were the co-founders of the 3M; these are multibillion-dollar philanthropies -- they got together with the business community and the education community -- University of Minnesota -- and the local government, and they created the Itasca Project.

They meet every two weeks. It's organized by the local McKinsey office. They provide the data. They have no staff. They have no -- well, they've got a website only because I wrote about them basically. They thought they better have a website up, so they did put a website up. And their motto is -- they do have one thing, though. They have a symbol, and their symbol is a dining room table where everybody gathers around, you leave your politics at the door, and they have started an amazing number of projects

around inclusion, minority education, Buy Minnesota supply chain, getting a partner with the University of Minnesota to spin off more projects.

And I tell the story about four years ago, when Pawlenty was running for President, he was the governor, and to show he was a loyal Tea Party guy he refused to sign the transportation bill because it was going to cost money. And the short story is the Itasca team made him do it. They got four Republicans to split off. So they're deeply involved in politics, but in a totally nonpartisan way, revolving around the common -- the Minnesota Commons. You know, some people think it's authoritarian; I don't. I think it's an amazing initiative by the community to trump deep partisan politics, and if you go to their website and see the things that they're doing.

Now, can other cities replicate Itasca? I don't know. It's very unique to the culture of Minnesota to have this kind of group. But they run the state, have no doubt about it, and it's quite amazing.

MS. LIU: I was just thinking that Tom, like, speaks our language. I think you should be a nonresident fellow with us. (Laughter)

MR. FRIEDMAN: I appreciate that.

MS. LIU: But we do see, by the way, a lot of organizations that do have CEO groups and civic organizations that are their version of Itasca that are doing really amazing things. And, in fact, you know, I told Tom yesterday that we actually put out the report called "Mind the Gap" when Itasca was formed.

MR. FRIEDMAN: Right, yes.

MS. LIU: Which prompted them to focus on the racial disparities within the coming workforce. And, you know, Tom's got -- one of the things you should do is read his books, especially the last couple chapter, you know, the one thing -- because you'll see lots of really promising stories about things that are happening in Minneapolis

and St. Paul. It's a region that we know really well, too. And I was just on the phone with Mayor Rybak the other day, who is now the head of the Community Foundation --

MR. FRIEDMAN: Former mayor of Minneapolis, yeah.

MS. LIU: Yeah. And, you know, the line there is, you know, not only are we the land of 10,000 lakes, we're also the land of 10,000 initiatives.

MR. FRIEDMAN: Yeah.

MS. LIU: They come up with lots of solutions. Their constantly working to solve things. And it might be cumbersome to have a lot of initiatives, but it also demonstrates just the initiative to (inaudible) work together as a community to solve solutions [*sic*]. And they were the first community in the country to create a charter school. You know, the charter school movement came out of Minneapolis-St. Paul.

MR. FRIEDMAN: Also amazing healthcare, HMOs, you know, really --

MS. LIU: So a lot of the really great sort of -- when we talk about the laboratories of democracy coming out of these places, it does come from a lot of these regions.

MR. FRIEDMAN: Yeah, I should say in the book I quote my friend Gidi Grinstein, who said nothing has to be invented today. I can promise you, whatever you imagine some community's already doing it. Nothing has -- it just needs to be scaled and shared.

MS. LIU: Yep. And I'm going to move on in a moment, but when I was talking to Rybak, he said, you know, even recently, because of the post-election climate and the uncertainty and fear in a community that's increasingly Somali and diverse, is they already had a public event where the residents wanted to welcome the Muslims and embrace their Muslim community. And you just don't see that very often. And so, again, this is what happens in local communities in response to what they're seeing, you know,

nationally.

MR. FRIEDMAN: I would say that not only do they do that, but they actually do something even more important. They've also challenged the Muslim community, which is to say we really are so eager to see what spices you're going to add to Minnesota, but we also kind of like our values here, too. So there's something on you and there's something on us. It's on us to really embrace you, but it's on you to not live behind a wall cloistered. Because we're not going to have Ben Liu here, okay? You want to live in Minnesota? We want you to be part of the community and we want you to add to the community, but nobody's going to live -- we treat women a certain way, we believe in local government in a certain way. And you're going to have to make that change, too.

MS. LIU: Yeah, it goes back to that compact you're talking about.

MR. FRIEDMAN: So it's really important. It's not just one way.

MS. LIU: So I want to ask you one question and I'm sure there are a lot of you who want to weigh in. Let's talk about the politicians. Right? You talked about all the celebrities that have come out of St. Louis Park, but this is a state that's also home of Hubert Humphrey, Walter Mondale, Paul Wellstone, Arne Carlson, Bill Frenzel, a Republican congressman who --

MR. FRIEDMAN: I've got a great interview with Frenzel, who was a fellow here before he died.

MS. LIU: He was here at Brookings, yeah.

MR. FRIEDMAN: And it's an amazing interview, yeah.

MS. LIU: What do you think about those crop of leaders and how do they compare to the politicians today?

MR. FRIEDMAN: I think they're just head and shoulders above 99

percent of the people in politics today. They believed certain things. They believed in partisanship, but they also believed, at the end of the day, you have to compromise and you have to govern. And that's what Minnesotans expected of them, as well.

The idea that you'd come to Washington to oppose governing would be utterly alien to those people and alien to the community, I think, in Minnesota. So these are special people.

And I've interviewed Bill Frenzel, who was a Republican, and with Vice President Mondale, who I just saw this week when I was back home. And these were -- you know, somebody pointed this out. I don't want to get into the whole Trump thing, but it's just something because it's related to this question. Have you ever heard Trump use the phrase "I'm really eager to serve?" (Laughter) All Trump ever tells you about is how he won, okay, but he never says I can't wait to serve. You know what I mean? He can't tell you more different ways about how he won, and that troubles me.

These people came to serve and all of them, Republicans and Democrats. And at the end of the day, they knew governing and politics were about compromise. And what happens when the world gets this fast, and this is what does worry me about the team coming into Washington, small areas of navigation when the world is fast can have vastly destabilizing consequences.

You know, when we just needed to go 500 miles at 5 miles an hour, if we had a bad leader, get off track, you'd get back on track with very little pain. When you need to go 5,000 miles at 500 miles an hour and you have a bad leader, you have an error in navigation, like a 747 where the pilot entering the navigational data just transposes two numbers, you can get so far off track so fast that the pain of getting back on track can be really enormous.

MS. LIU: Yeah. Okay, it's your turn. Any questions for Tom? We'll do

these two right here. Because we only have about seven more minutes, I'm going to ask you to keep your questions tight, introduce yourself, and we'll do two in a row.

MR. BONPOL: Sure. Anir Bonpol, independent consultant. Going to intersect your work with a different subject matter, international development strategy.

So East Asia was low cost of labor, export-oriented. Flattening populations in China and India soon. Africa projected population up to a billion in 30 years.

MR. FRIEDMAN: Yes.

MR. BONPOL: With your graph, more technology substituting for labor, looks like the middle rung to climb out is going to be very difficult. What advice for African Development Bank or World Bank?

MR. FRIEDMAN: Contraception. (Laughter) You know, there's going to be a real problem. And I tell the story of I did a documentary in the middle of this book for National Geographic on human migration from the Sahel and the arid zones of Africa to Europe. And people think this is an Arab, Syria, Afghanistan problem. It's not.

Basically 70 percent of this is Africans from -- we started in the documentary, and you can see it online on National Geographic, we started in the northern Senegal villages, which, because of climate change, have already experienced 2 degrees rise in average temperature. In other words, they're already living what the Paris Agreement was signed to prevent. We shot this documentary in 110-degree heat in April and my producer got heat stroke doing it, so it was one of the most difficult things I've ever been part of journalistically.

So you go to these villages, as we did, and there are no males between the ages of 18 and 60. They've been completely depopulated of males because small-scale agriculture there, the combination of population growth and climate change, the

villages can no longer sustain people.

So what's going on is these men now -- this is where all these vectors meet. So there are now giant human migration/smuggling networks in Africa that all use WhatsApp. So this is where globalization comes in. You get in touch with one of these human migration smugglers. They smuggle these guys from Senegal -- actually they can travel because there's an economic zone there, so their passports are okay -- to Niger. And they all gather in Agadez, once a U.N. World Heritage site, and we followed them to Agadez. And every Monday, they come out of safe houses and gather at the border post outside of Agadez, which used to be a great tourist city. And the entire tourist industry has been repurposed to human migration.

So all the buses and trucks, they packed about 20 to 25 men in the back of these Toyota Jeeps. They're all standing, and they gather every Monday. And about 9- to 10,000 a month, according to the U.N., then make this mad dash to the Libyan border where they enter Libya illegally and then hope to get into Europe.

Now, you interview them, as we did, and you say, look, you know, your chances of getting to Europe are virtually zero. And they have a very simple answer: Mr. Friedman, I can't afford to buy my father, my sick father, an aspirin. So you know what? I'm going to take my chances.

They do not want a Live Aid concert from Bono. They actually now can see Europe on their cell phones and so they're going to come. So we're just at the beginning of this process.

So unless you can stabilize population and stabilize small-scale agriculture, we're seeing the breakdown of small-scale agriculture because of what's going on. So to think you can have an immigration policy without a climate policy is such utter stupid nonsense and bespeaks someone completely moronic about what's actually

going on in the world today, someone utterly unknowing of what's actually happening on the ground. Because if you don't deal with these three accelerations -- because these three accelerations they're just laughing at you. They're totally intertwined. They know that.

So the idea that you can wall one off and say we're going to deal with this and become energy independent by digging for fossil fuels and not worry about immigration -- because -- so what's happening now Europe's deeply in peril because these people aren't going to stop. And who would if you were in their shoes? They're coming. And is Donald Trump going to build a wall bigger than the Mediterranean? Think so? Well, the Mediterranean hasn't worked, so think about that.

And it's going to happen in our hemisphere. You know, we've got 52,000 orphans from Guatemala, El Salvador, and Honduras 2 years ago. Fifty-two thousand. Israel got over 60,000 from Eritrea and South Sudan. Huge problem for them. They're just trying to get out of the world of disorder into the world of order. They're not looking for kosher food. They never even -- they don't know from Jews. Okay? (Laughter) They just know island of stability, jobs/work, I'm knocking at your door.

So Honduras, El Salvador, Guatemala, three probably most deforested countries in Central America. Do you think there's a connection?

SPEAKER: Thanks. (inaudible) from Western Media. So, Mr. Friedman, I know you have a lot of disagreements with Mr. Trump, but you do have one common thing with him, that you have a focus on U.S.-China relationships. And recently he said China is a currency manipulator and he also had a call with the Taiwanese leader, Tsai Ing-wen. So according to your observation what do you think Trump really wants from China? A possible trade war or push China back to the negotiation table?

And also, as you are really good at using metaphors, so what kind of

metaphors do you want to use to expect the U.S.-China relations during a Trump administration? Thanks.

MS. LIU: Great. Before you answer that I want to take one more question before we wrap up.

MR. FRIEDMAN: One all the way, that lady. We'll involve the back of the room.

SPEAKER: Hi. My name's Natasha. You've talked a little bit about both the need for our parties to explode, but also for a need for compromise. So there are groups of moderates still out there, both at the congressional level and at the local level, despite the outcome of the election and the partisan politics that came out of it. How do you think that we can get more buy-in for these moderates? There's the new Democrat coalition on the House side, for example. And there are people that are working to attack globalization to kind of create more innovative policies, so how can we coalesce around them?

MR. FRIEDMAN: So those are all good questions. You know, on China, honestly I don't know. Because what we've already seen -- you know, what President-elect Trump said during the campaign has deviated in some ways to what he's done, so really I can't give you an authoritative answer. I haven't talked to him about that. And even if I had, I wouldn't trust, you know, what it would mean right now. (Laughter) I mean, it's just -- I think we're all just going to have to wait and see.

But I'll tell you something I mentioned earlier. Actually I broke my shoulder in the middle of writing this book. And you know what I learned from breaking my shoulder? I had no idea how many things it was connected to. I had no idea it was connected to breast muscles, my fingers, my lower back, my middle back. Never break your shoulder, okay? (Laughter)

And you know what we're going to discover when we abandon TPP, when we blow up the EU, when we destroy NATO, when we destabilize the China-Taiwan-U.S. security relationship? You know what we're going to discover? How many things they're connected to. So be very careful about breaking your shoulder or breaking large institutions that have been put together over a long period of time. You'll discover how many things they're connected to.

You know, from your lips to God's ears. I have no idea; this is really early on. But I do think we're in a plastic moment politically that there's too many people feeling unrepresented by this structure. Maybe they're on the far left, they feel it. Maybe they're in the center. I don't know where it's all going to balance out, but I think there's just too many people today feeling unrepresented by a political party that really galvanizes, you know, a critical mass of their aspirations. And so I think it's going to be very interesting in the next couple years.

MS. LIU: So we could talk forever on these very large issues. I would encourage you to buy the book. Brookings is offering a discount today for those of you who are interested in purchasing the book. And Tom Friedman has graciously offered to stay for a little bit to do book-signing. So please join me in thanking Tom for really pushing us here. Thank you.

MR. FRIEDMAN: Thank you. (Applause)

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