

Transcription of “Pope Francis and *Laudato si’*”

Presentation by Jeffrey Sachs, PhD, at Villanova University, April 13, 2018

There is no voice more important in the world than Pope Francis in the struggle for justice and the fight against climate change, and the fight for decency, and the fight for peace. It’s an incredible privilege anytime I have the chance to speak about the Church’s social teachings and to participate in any modest way in helping the Church in this mission. We really need to give Pope Francis all of the support because he is unique in the world in his capacity to reach the entire world, to open the eyes, to help people to see and to hear and to explain what is happening.

I’m going to speak about *Laudato si’*, and I can say at the start that it’s a papal encyclical, but it’s also a text that you can teach in a first-year earth sciences graduate course, in a public policy course, in a theology course, in a moral philosophy course, in a diplomacy course, and in every one it would meet the standards of rigor. It’s a most remarkable document. It is an essential document for our time. It’s a privilege for us to have it and it’s a privilege to speak about it to such a learned group and with so many people I profoundly admire: Cardinal Maradiaga and the president of the Pontifical Academy of Social Sciences, Margaret Archer, and many others here. Thank you very much for the opportunity.

“New things”: The Church has been leading world thinking about new things for 125 years. In my view, there is no question of whether the Church is involved in the turbulent events of society. In the modern times, since *Rerum novarum*, the Church’s social teachings have been resonant, powerful, I think extraordinarily important, and not only for the members of the Catholic Church but for the world, because since Leo XIII took on the challenge—and there was not such a clear or obvious call for him to take on this hard issue of what did industrialization mean for the world from a moral point of view—since Leo XIII took on that challenge of new things, the new thing of industrialization, in 1891, the Church has repeatedly been grappling with the profound transformations of the modern world.

We live in a time defined by transformation. It wasn't always like that. It's not true that that is always the state of affairs with humanity. Of course, every generation has confronted crises and challenges and wars and turbulence, but, really, it's only in the last 225 years, after ten thousand years of our lives as rural, agrarian, smallholder farm communities around the world that the world, in a blink of an eye in historical times, became industrial, even post-industrial. Many places, including our home in the United States, became urban, became filled with billions of people—now 7.6 billion people—became utterly globalized in our day-to-day lives.

These tumultuous changes require constant rethinking and recalibrating, and as Pope Francis has talked about the globalization of indifference, the paradox is that in our most turbulent time, we somehow have the risk of becoming indifferent or numb to the changes that are underway. The Church has repeatedly drawn us back from that numbness to look closely at what these changes mean. I mention, as a reader and an admirer of the Church's social teachings, some of the dramatic highlights, because I think these teachings changed the world and are vital to the world.

1891: Pope Leo XIII began the modern social teachings by asking about industrialization in *Rerum novarum*. In 1963, which I'll refer to again later on, Pope John XXIII talked about the new things of the cold war and the nuclear age in *Pacem in terris* and gave a call for a moral framework of statecraft, which we desperately need today. I would urge everyone to open up *Pacem in terris* again and preach it, because we are at the brink of war—incredibly dangerously so. These days, we are alerted by tweets to what could be complete devastation. That's how odd our circumstances are. *Pacem in terris* was written at the height of the cold war about how to find a path to peace. I'll return to that later.

In 1967, another "new thing" was considered by the Church by Pope Paul VI in *Populorum progressio*, and the new thing was the developing world. What did that mean? Before that, that was the imperial world of Europe, which owned the property of Africa and so much of Asia. But as decolonization came,

Pope Paul VI considered the implications. It's a magnificent document. It is the most powerful and original statement about the moral requirements of the rich world to help the poor world that we have. Pope Paul VI made a stunning statement that development is the new name for peace in *Populorum progressio*. It called for development aid as a fundamental moral principle and practical principle for a stable world. This again, I think, was the Church in the service of humanity, helping to understand the moral framework of this new, postcolonial world.

A quarter century ago, Pope John Paul II, on the 100th anniversary of *Rerum novarum*, issued the encyclical *Centesimus annus*. I had the great privilege to participate in some of the discussions of the Pontifical Council for Justice and Peace in the lead-up to that encyclical. That was about another new thing. That was the end of the Communist era, and of course Pope John Paul II was especially interested in his homeland. What should become of Poland? Should it adopt a market economy? What should the future be? The question, what kind of economic system, was asked in the most practical way. What should be done? I'll discuss the answer in just a moment.

Pope Francis in *Laudato si'* continues in this magnificent tradition. Pope Francis is confronting another fundamental change of our time that has been called the Anthropocene. It's a term we use a lot in the Vatican because it was coined by the academician in the Pontifical Academy of Sciences Paul Crutzen and championed by him. It's a technical term of geologists that means that human activity on the planet is now so intensive, the scale of the world economy is so large relative to the finite resources of the planet, that humanity is now fundamentally driving physical earth processes such as climate, rainfall, temperature, storms, heat waves, droughts. These are not visitations of nature. These are human-driven events.

Pope Francis is the first pope to take the Anthropocene as our challenge explicitly. Of course, the first to consider the environment was his namesake; Francis of Assisi did that already a millennium ago. But to

take the Anthropocene as our practical reality. And some Catholics said, how could he do that? What is he talking about—climate change, science? My thought, and I know his thought, is, what else can one talk about? One must talk about this because we absolutely must face the moral implications of a world now that is driven by human activity. Unprecedented, but scientifically demonstrated.

And I'll say, parenthetically, that the Church has a treasure that dates back more than 400 years ... and I get to sit in the chamber of that unique treasure, the Pontifical Academy of Sciences, in which the Church mobilizes the world's leading scientific knowledge, and not in any way in competition with faith but absolutely alongside of faith. Faith and reason. In issuing this encyclical, Pope Francis convened, in essence, the Pontifical Academy of Sciences convened, the world's leading scientists on this issue for several years. The top people. And one secret about the Vatican: Everybody comes for an invitation. You can convene everybody, and you have the best minds, and so that's why the encyclical is remarkably rigorous in its science, as well as in its piercing moral insight. And that, by the way, is a treasure that I think no other religion has—to have an academy of sciences that dates back to the Academy of the Lynxes, 1603, with Galileo being one of the founding members, and established a tradition of science and faith so that the Church can have the world's leading scientists in health (we just had a meeting on air pollution and climate change), ... on climatology, on energy systems, on artificial intelligence, on the whole range of knowledge that's needed. Those sciences don't give the answer to the moral question, what should we do? What must we do? What must we do to preserve what is of ultimate value, human life and human dignity? That of course is what is taken up in these teachings.

For all of these social teachings, the central point from an economist's point of view is that they all defend the common good as the essence. As an economist, I want to say something very basic and very clear, because in America we forget it often. The market does not defend the common good per se. This is crucial to understand. The market in no way defends the common good. It can have many virtues in

terms of the outcomes. It can produce wealth. It can produce human activity. It can give work. It can provide jobs. But it does not in any way guarantee or pursue the common good.

The essence of the Church's social teachings, including *Laudato si'*, is that yes—and going back to *Rerum novarum*—yes, a market economy. The Church has consistently stated the importance of private property in a market economy. But the Church has been very clear since *Rerum novarum* that a market economy must function within a moral framework. Because of that, no private property can be considered inviolate. It's never an answer to say, "But that's mine!" That can never be an answer to the questions of climate change, or conserving biodiversity, or helping the poor. "You can't take from me; that's mine," which is a very American attitude. The Church's teachings are not that. They are the opposite, which is yes to private property but not to inviolate private property. Redistribution, taxation, limits to what can be done, responsibilities of business to their workers—these have been the core teachings of the encyclicals, including *Laudato si'*.

I think the most important practical principle of all of these teachings, and it's repeated in every encyclical, is the universal destination of goods. I love this principle as a practicing economist because it says that we should consider the resources that we have together, as humanity, to be the resources that we have available to solve human problems. This becomes the most practical point when you're fighting poverty, for example. Poor people don't have resources, but the world is rich. The idea that the poor need to be poor because they don't earn enough, so what can you do, is the basic violation of this idea of the universal destination of goods.

The goods belong to everybody. How can we live in a world where millions die every year of their poverty in a world of unprecedented wealth? At least five million children will die of their poverty this year. You won't read about it in the newspaper, though. These are deaths from infections, from mosquito bites, from unsafe water, from undernutrition, from failure of an infant to be resuscitated

because there was no clinic or hospital or trained health worker. And there will be five million deaths of children under the age of five this year. How can this be in a world of wealth? The Church's answer is, it mustn't be.

We can never take it as the outcome the way it is. "That's the way the market works." Sometimes I complain about drug companies charging prices that are too high, and I get ... you could call it hate mail. They're not exactly love notes from Wall Street. Professor Sachs, what's your problem? And I write back, people are dying. And these Wall Streeters write back to me and say, but Mr. Sachs, you're an economist. You know that's how the system works. That *is* how the system works. But what the Church is teaching is that the system must not work that way. And what the social teachings are saying is that we can never simply say that's how the system works. A market economy must have a moral framework.

We considered last year at the Pontifical Academy of Social Sciences the 25th anniversary of *Centesimus annus*—and I think it's worth considering that because it's one of the motivations of *Laudato si'* in 2015. In 1991, Pope John Paul II was confronting three new things. One was the collapse of the Soviet system. The second was a new predominance of multinational companies. The third was rapid change at the global scale—geopolitical, technological, and demographic. Pope John Paul II gave the key message. Yes, adopt a market system, but within the moral framework of the universal destination of goods. It's a wonderful encyclical, very clear.

Twenty-five years past, and unfortunately, the pope's admonitions were not heeded, and certainly not in this country, the most powerful and the richest country in the history of the world. We did not heed this call for a moral framework. Rather the opposite. We were rich. We were by ourselves. The world was unipolar. We were now the sole superpower. We could do what we want. The aid budget collapsed actually after 1992 under President Clinton. Why? Well, we don't have to compete with the Soviet Union

anymore. We're not bidding for good will. All that wealth—let's enjoy. Let's have a boom. America first. This is how we reacted to the end of the cold war. And it's the opposite of a moral framework.

We've behaved that way inside our country and internationally. We unleashed the multinational companies. We cut taxes for the rich, we cut social programs, and we unleashed a series of wars. The US has been in nonstop US-led war for a generation now. We don't even know it, by the way, because we don't understand what's happening. How many people here know that the Syrian war was started by the US and its allies? Most Americans say, no, no. It was a civil war, and then the Russians intervened, and ISIS, but we stayed out. That's the complaint.

We didn't stay out. President Obama sent the CIA to coordinate with Saudi Arabia in 2012 to give arms to a rebellion, all for geopolitical purposes. We wanted the Russians and the Syrians out. Why? Because it's an affront to the US if others are someplace that we don't want them to be. The United States has military bases in 70 countries around the world, and if another country tries to have a military base, we say, that's destroying the international system. So, we sent in a secret army, we armed the rebellion, and now 600,000 people have died. Ten million have been displaced.

If you read the *Wall Street Journal* editorial today, it says we have to stay in Syria, because if we don't, Russia and Iran will be there. And why do we need Syria? Because that's the underbelly of NATO. And that's the logic you can't not be everywhere, because if someone else is somewhere, they are a threat to the next place, and you're there, or you're there, or you're there—the old domino theory that kept us in Vietnam also. We did not heed this message, and we have squandered trillions of dollars, and we have made a mess, I'm afraid to say.

That is what confronted the papacy of Pope Francis: a world of rising inequality and exclusion, the US with unprecedented inequality—at least unprecedented for 100 years; it was greater during slavery. But since the 1880s, we are probably at an all-time high of inequality in this country. We have extreme

poverty in the midst of great wealth globally—millions dying of poverty, and nobody even knows. You have to be a specialist to understand it. If you are a public health specialist, you don't say they are dying of poverty. They're dying of malaria. But to die of malaria means dying of poverty because to be cured of malaria requires an eighty-cent dose of medicine and a health worker. Somebody has to be providing that. If the poor don't have it, they die, and so that's dying of poverty. That's the problem.

We are violating what the ecologists call planetary boundaries. These mean the safe operating limits for energy systems, for water use, for land use. Our economic activity is so large, and when we consume, we don't know all the steps of the value chain. When we buy a product that came from a deforested region 10,000 kilometers away, we don't recognize it. When we drink our coffee, we don't know or can't ask the question, who was at the supply end of that wonderful cup of coffee this morning? But with the world at this scale of activity, we're busting the safe barriers.

We have shifting geopolitics of a fundamental sort, and a very dangerous sort, because as I'll show you in a moment, the US is nervous and a little trigger-happy. We have an urgent need for new global cooperation to address these *problems. That is the kind of world that we confront and that Pope Francis is addressing in Laudato si'*.

Yes, the world economy is like a juggernaut, rising three or four percent per year, doubling in scale every generation. Since 1980, it's gone up more than four times in scale. Since 1991, *Centesimus annus*, the world's economy has tripled in scale. Poverty has come down, and that is important to know. It's important because it tells us what *can* be done if we take accountability and aim to do that.

We are in the midst of an unprecedented, fastest-ever diffusion of technology in the digital age. Isolation has been ended, which is potentially quite wonderful. Of course, we're also learning so too may privacy have been ended. Maybe we now have a political system manipulated by the trolls on Facebook, and our own data is marketed relentlessly by these giant tech companies.

But here's the downside. This is one economist's measure of inequality, called the Gini coefficient. It shows the trend in the United States. We've become more and more and more unequal. And what do we do because of inequality? We pass tax cuts for the rich. Why do we do it? Simple. Because the rich paid for it. Because they finance the Congress. Because we have a profoundly corrupt political system. But it's a legal corruption, because the Supreme Court said to the rich, give whatever you want. We'll call it free speech.

The free speech of David and Charles Koch owns the Republican Party now. And what did they want? They wanted tax cuts. Why? I don't know. Because they needed to have their \$50 billion each of wealth become \$60 billion each of wealth. Maybe you can help me understand that. But there is no social purpose in the world met by that. That is the most particular destination of goods. How many goods need to be in the hands of David and Charles Koch? How many tax cuts do they need? But they pay for the Congress, and we call it free speech. And I apologize. The Supreme Court Justice of the United States John Roberts was my classmate at Harvard. But somehow, we didn't see eye to eye.

And we have scenes like this everywhere [image on screen of Turkish-Syrian border], and now we'll have the military on the US-Mexican border. We're militarizing the borders. What should we be doing with Mexico? Running power lines from wonderful solar energy in Sonora to the population centers of Texas and the US Southwest. We have every opportunity for cooperation right now to solve the climate change problem. Instead, we're sending the military and the president is trying to build walls. We have war everywhere, where the US has had a hand in the instigation—and I didn't explain it adequately.

We decided we wanted to overthrow a government. Remember President Obama said Assad must go? That's a strange way for any leader to talk about any other country's leader. That is an arrogance of our foreign policy. And when a president says someone must go, then they sign a presidential order sending the CIA because that's the private army. You won't even know about it, because the *New York Times* and

the *Wall Street Journal* and the *Washington Post* have hardly reported on this for the last six years. If you want to look it up, it's called Timber Sycamore, the CIA program started by President Obama to overthrow Assad. Well, all the armies came in. The Russians came in in 2015, and then Americans say, oh, you see, you see? The Russians came in. Now we have to be there. But this is the kind of escalation—mindless escalation—that is utterly predictable if we don't think.

We've had an epidemic of corporate greed, I'm sorry to say. Our banks have paid more than \$200 billion of fines, but by the way, that's shareholder money. No bank executive went to jail. They're protected by both parties. This is not partisan.

We know because of the Panama files and the Paradise files that there are 20 to 30 trillion dollars abroad in tax havens. My least favorite drug company in this country, Gilead, charges \$1,000 for a pill that it costs them \$1 to make to fight hepatitis C, which is a killer epidemic in this country, and they charge \$95,000 for a drug treatment dose that costs about \$100 to manufacture. And they didn't even develop the drug. They bought the patent. When I write about that, I'm told, you're an economist. Don't you understand? What I understand is we have two million people with hepatitis C infection that are left to have their livers diseased because their insurance companies and our federal government won't reimburse for \$95,000. And that's considered normal.

We have Exxon and the Koch Industries inducing the senators to induce the president to pull out of the Paris Climate Agreement. What's that all about? Why is the United States the only country in the world—the *only* country—that says, this is unfair. How could it be unfair? The whole treaty doesn't name one country. Everybody is in it together. But one country pulled out, and that, ladies and gentlemen, is because we have corrupt politics, because people like the Koch brothers, or powerful companies like ConocoPhillips, Exxon-Mobil, Chevron, hiding behind the US Chamber of Commerce and the American Petroleum Institute, tell the president, pull out. And what does he know? Nothing. So, he

announced, we're pulling out. I don't think we'll pull out. We still have three years to fight this, and boy, do we need to fight this.

Let me turn to teachings of *Laudato si'* but finish with the framing. First, this is a picture of where the children are dying. Just so we realize the concentration of deaths and our ability actually to do a tremendous amount about this, as I'll explain in a moment. This is a map of where it's warming. This is the so-called temperature anomalies compared to the average temperatures of the past fifty years made by NASA and the National Oceanic and Atmospheric Administration. You will notice that most of the map is red. That means that the world is warming. We are now 1.1 degree Celsius, roughly 2 degrees Fahrenheit, warmer than we were at the start of the industrial revolution.

I'm sure everyone here knows it, but just to say it, there is no scientific debate about this at all—that this is human caused, that it's caused by the carbon dioxides that we put up from our energy system—all aspects of this debate—is it human caused?—is manufactured by the oil industry lobby and across the street from where I live. I'm on the west side, but Madison Avenue is on the east side. That's where they do this business of creating confusion. Rupert Murdoch, who is not a nice man, runs Fox News and the *Wall Street Journal* to obfuscate and to put the whole world in mortal danger of global warming.

We are ending with disasters. We had three mega hurricanes this past summer: Harvey, which hit Houston; Irma, which tore through the Caribbean; and then Maria, which devastated Puerto Rico. Four days of storms, \$265 billion of losses. Can you imagine? And it didn't move one Republican voice because they are all on the pay of the Koch Industries. That's how bad our situation is. They don't speak honestly because they also know not only will they not get campaign contributions but they will face an opponent in the primaries, and they'd rather lie and do nothing as we're being devastated than tell the truth. For about ten percent of Puerto Rico's population, the lights are still not on, more than six months

after these storms. That's a colony of the United States, and they don't have political representation, and nobody tries very hard. That's a real problem.

We had forest fires that caused \$18 billion of damage because of mega drought in the US Pacific West, and then there was some quick rain, so lots of tinder, lots of vegetation, and then poof! Dry soils, tinder, and the worst forest fires in California, devastated a large part of Napa Valley nearby and \$18 billion of losses.

And of course, we don't see how the poor are suffering usually, because when there are droughts, when there is famine, if our newspapers say a word about it, somebody's quoted as saying, well, that's because of the corruption of x, y, and z, and so we blame the poor. Jesus did not say in Matthew 25, remember, blame the poor.

And this worries me a little bit because the last time Earth was about half a degree warmer than it is now was 115,000 years ago in a previous geologic epoch called the Eemian period. In the Eemian period, you can see on beaches in different parts of the world, the sea level was about six to eight meters higher than it is now. We're absolutely close to a collapse of the ice sheet. Could take 100 years, could take 150 years, nobody knows. But we are that close in temperature. Then we're told, don't worry, don't do anything, fake news, all a hoax, by people who are a combination of stupid and reckless. Reckless. Grown-ups. Our representatives.

One more geopolitical point: The world's changing a lot. One of the reasons for that rapid world growth is that China's economy has become a larger one than America's. That's driving our security establishment deeply neurotic these days. That's why there are trade wars and this war and that war, because it is an affront to the US security establishment; how dare another country become larger than the US? They have 1.4 billion people; that's a starting reason. They are more than four times the size of the US; they are about one-fourth of the income per person, and so in the aggregate, they are about

twenty percent larger than the US. And they are smart and they are working hard. They are not to be contained. And a war would be ... a cold war, a trade war ... stupid and useless beyond belief. A hot war? I don't even have to tell you. The last one.

What does this mean? This means we need partnership. We need cooperation. Pope Francis's outreach to China is the most sensible, imaginable thing that could be done. Of course. Vital for the world. Vital for the Church in its moral mission. Important for China. Important for global peace. I just wanted to mention that because that's another part of this backdrop. We need global-scale cooperation. China is the world's largest emitter of carbon dioxide now because it's the world's largest user of coal. It's got the heavy industry that produces our iPhones and other products. We'd better be cooperating. We'd better be talking. We'd better be solving problems together. That is why I'm so thrilled with the idea of the Church and China finding a dialogue right now, which I think is absolutely essential.

Pope Francis describes these problems, describes their moral import, because, after all, as he points out, life itself depends on us solving these problems. Then he calls for one world with a common plan. This is, in my view, the most important phrase. First of all, in the United States, we're not planning right now. Of course, we're going day to day. We don't even know what we're doing. We're at a terrifying moment. But even before this president, we weren't planning for the future. Planning even became a dirty word. That's communist; don't plan. But we cannot solve our problems without planning. How are we going to make an energy transformation? How are we going to shift from coal, oil and gas to wind and solar and hydro and geothermal energy? To keep us safe, how are we going to make sure that we use the information technologies in a way that promotes democracy and doesn't undermine it?

We need to plan, and Pope Francis calls for one world with a common plan. He says, and I think it's absolutely the most basic point, this is the new thing. "Interdependence obliges us to think of one world with a common plan. Yet the same ingenuity that has brought about enormous technological progress

has so far proved incapable of finding effective ways of dealing with grave environmental and social problems worldwide. A global consensus is essential for confronting the deeper problems which cannot be resolved by unilateral actions on the part of the individual countries.”

America first makes no sense. None at all. It never could, but especially now. The whole concept that each country just promotes itself degrades diplomacy, snarls at the opponents, threatens war by tweet. We're in a dangerous moment.

A positive handhold for us, or a foothold on this mountain on this journey, are goals that were adopted by all 193 UN member states on Sept. 25, 2015, and then the goals adopted for climate change in Paris on Dec. 12, 2015. Within a few weeks, the world's governments adopted a framework. It's fragile. Pope Francis had a huge part to play in that. Enormous. *Laudato si'* was an inspiration. Pope Francis met with world leaders to promote these ideas. He helped all of society to understand why we needed to find an agreement. And on that wonderful morning of Sept. 25, from my camera, exulting in the moment, this is Pope Francis turning to greet Ban Ki-moon after Pope Francis gave the opening speech at the special session of the UN General Assembly, in which the Sustainable Development Goals were adopted that morning. The world leaders rose to their feet, and in a very rare moment of acclamation, unanimously adopted these goals.

Our challenge is now to meet these goals. Then I'll close by giving you a little bit of economics of why we can achieve these goals and why the main challenge we face is a moral one, not an economic one. It's our minds, it's our attitudes, that are the most important obstacles right now, by far.

So, a few relevant magnitudes that I want to keep in mind. First, the world production each year now is about \$130 trillion. As a macroeconomist, I divide lots of things by \$130 trillion because I say, that's not much of our income. If someone says to me, we can fight disease for x cost, oh, that's not much because we are rich. If we choose to use our resources in that way, if we choose the universal destination of the

earth's goods. Thirty-six millionaires (?) have among them \$129 trillion in the bank. Not bad. They could do a few things with that. And the list that I'm particularly interested in: There are 2,208 billionaires on this year's Forbes magazine list. Among them, they have a net worth of \$9.1 trillion.

Ladies and gentlemen, that's a lot of money. I'm going to show you how we can use the money, because it's for the common good. No one needs \$9.1 trillion of 2,200 people. We're spending worldwide one-and-a-half to two trillion dollars per year on armaments. We don't get a return from that. The US has lost four to five trillion dollars on the wars in the Middle East, doing nothing but destruction. You may note in this odd world of ours that after a place is destroyed, then we have a donors conference to rebuild it. I really dislike that approach. My view is that if you destroyed it, you pay. That would put the bill on us. That might cause us to think before we do the next bombing. It's called the polluter pay principle.

The daily Pentagon spending, another handy divisor, \$2 billion a day. Two billion every day. Money in tax havens, \$20 to \$30 trillion. The top 25 CEOs of hedge funds in 2016, \$11 trillion among them. It's probably true ... I wouldn't say half of them are cooks, a smaller proportion, but a number of them absolutely got their funds on insider information.

Let me give you some bottom-line price tags. The cost of saving five million lives next year—five million. That's by deploying community health workers. That's by getting the basic medicines there. That's by ensuring safe delivery of children. It's about \$40 billion a year. It is half of one percent of the net worth of those billionaires. Just 2,200 people with a half of one percent could save millions of lives. I'm going door to door now, seriously, to the billionaires. I'd like you to help me. We want to tell them that this is the real purpose of their wealth. They could be finding more meaning, more return, more benefit than they could ever dream, saving millions of lives in very practical ways. Antimalarial medicines. AIDS

treatments. Safe childbirth. Neonatal resuscitation. Community health workers. Nothing magical. All practical. All requires more than the poorest people can mobilize on their own.

The AIDS itself, that epidemic, could be ended through a program called 909090 if we enabled people to get the medicines they need. In our country, by the way, because of the patent prices, approximately half the people who are HIV-infected in the United States are not on retroviral treatment. This is a cruel country. It's a marginalized, stigmatized community, and an impoverished one and a weak one, and the drug companies charge 100 times their production costs in that case.

We could end malaria deaths for five billion dollars a year. I fought very hard for ending malaria under the Millennium Development Goals and devised a scheme to do so, and it has reduced malaria by about seventy percent. I campaigned very hard for it, and I'm very proud of it. But it shows, and there was a lot of resistance, for no reason other than a couple billion dollars, but what I'm pointing out is, what is a couple billion dollars among friends? What is a couple billion dollars, if it takes five billion dollars to end malaria deaths, in effect?

I have a strong policy recommendation, and that is that the Pentagon should take a long weekend. Five billion transferred from their budget would enable us to end malaria on the planet. About \$300 billion a year approximately, something like twenty percent of the arms spending, but less than half of one percent or maybe on the order of about 0.6 of one percent of the rich country income could end extreme poverty worldwide. Again, for about half of one percent of the net worth of the billionaires, every child could be in school through secondary school around the world. The cost of solving the climate change climate crisis by spending a little bit more to move to zero carbon energy is about one percent of our output. Are we going to destroy the planet because we won't spend one percent to save the planet?

Let me end here. Our barriers are in our heads. That's why Pope Francis is vital for our survival and well-being, why our supporting him and his cause and our cause is essential, and why I want to emphasize in closing the crucial role of the Church. I want to refer back to a moment of history that I think exemplifies what I think can be accomplished. Just after the Cuban Missile Crisis nearly ended the world, President Kennedy realized we can't go on like this, we will blow up the world this way, we have to find a way back from the brink. Pope John XXIII was dying, and he said at the end of 1962 and in early 1963, I will use of every ounce of my strength remaining to try to promote peace. Remember that *Pacem in terris* was not only his encyclical in the spring of 1963; it was his last encyclical and his last major effort, because he died soon afterwards.

Nikita Khrushchev, our adversary, also wanted to find a way back from the brink, and so three people helped to lead back. Pope John XXIII, when he issues *Pacem in terris*, had a hand-delivered Russian translation sent to straight to Khrushchev that day, and also to the White House. Khrushchev was eagerly waiting for it because he wanted to see the pope's words.

On June 10, 1963, at American University—and I think it's notable that it's at a university because for us as academicians that's our role to play, it's to help to convene and help to promote the ideas that can hopefully move the world forward—President Kennedy was invited to give the commencement address, and he gave, I think, the greatest speech of an American president in modern history, a speech that's called his peace speech.

The peace speech was unbelievable for any politician because rather than pointing the finger at the Soviet Union at all in the speech, it was all directed to the American people, and all of it said we must reconsider our own attitudes because we're dealing with human beings on the other side, because we have common interests on the other side, because even if we don't like their political system, they are

people of valor, people of culture, people of the arts, people of great achievements, people of bravery. He called on the American people, let us reconsider our own ideas towards peace.

The speech was so well received by Khrushchev, Khrushchev called the US envoy who was in Moscow, Averell Harriman, and said, that is the finest speech by an American president since FDR; I want to make peace with your president. Six weeks later, the Partial Nuclear Test Ban Treaty was signed. Then of course, just weeks after that, Kennedy was killed.

But Kennedy said something that I regard as utterly beautiful and alongside the social teachings. He said, and I want to end here, "So, let us not be blind to our differences—but let us also direct attention to our common interests and to the means by which those differences can be resolved. And if we cannot end now our differences, at least we can help make the world safe for diversity. For, in the final analysis, our most basic common link is that we all inhabit this small planet. We all breathe the same air. We all cherish our children's future. And we are all mortal."

Thank you very much.