A Keynote Conversation with Dame Louise Richardson

[00:00:00] Speaker 1: Thank you, and as one of the many people in this room, I think, who has benefited over the years from Rose's wisdom and mentorship and encouragement, it's also kind of a personal thrill for me to see her win this award. My task here is my honor to introduce the 13th president of the Carnegie Corporation of New York and the 10th president of the Carnegie Endowment for International Peace. And if you're wondering why I pronounced the name of our shared founder differently, it's because the two organizations, in fact, disagree over the correct pronunciation. Allow me first to introduce Dame Louise Richardson, a philanthropist, an academic leader, and an award-winning scholar of foreign policy and terrorism, with a deep commitment to promoting interdisciplinary research. Dame Louise spent 20 years as a professor at Harvard. In 2009, she became the first woman to serve as the principal and vice chancellor of St. Andrews University. In 2016, she became the first woman to serve as the vice chancellor of the University of Oxford, and in 2023, after serving on the Carnegie Corporation of New York's board for a decade, she became its first female president. To moderate this session is my boss's boss, Tino Cuellar, a lawyer, a political scientist, a public servant, and a jurist. As a professor at Stanford University, Tino directed the Freeman Spogli Institute. He served as a justice on the Supreme Court of California, and he is now the president of the Carnegie Endowment for International Peace. Please join me in welcoming Dame Louise and Tino Cuellar.

[00:02:11] Speaker 2: Thank you very much for that generous introduction, and good afternoon, everyone. Thank you for inviting me to speak to you today on a topic that could hardly be more important. It's a particular pleasure to speak at the Carnegie Endowment, which has been a sister organization and, indeed, a partner of the Carnegie Corporation since we were both founded in the early years of the last century. Now, our names do generate confusion. I can't tell you how often people have mistaken me for Tino. We look the same. Probably about as often as the president changes tariff policy, but I think Andrew Carnegie created so many organizations that by the time he came to the two of ours, he had run out of appropriate names, so we, in fact, have an endowment and are not in any commonly understood sense of the term a corporation, while the Carnegie Endowment is best known not for its endowment, but for the caliber of the work it produces. In any event, we at the corporation are delighted by our longstanding partnership with the endowment and our longtime admirers of the scholars attracted here and the quality of the work that they produce, work which advances our commitment to education, to promoting international peace, and to strengthening democracy. Now, my colleagues and I have regularly been asked, how is Carnegie adjusting our grant-making strategy in response to the great upheavals occurring across the globe? For those in this room, there is usually a second question. Will Carnegie continue to fund nuclear security work? The answer to the first question is guarded. We're working on it. We're still trying to figure out how we can be most effective. Given the delta between our limited resources and the scale of the global changes in the international order that are underway, the answer to the second question is unequivocal, yes. As I hope this talk will make clear, we remain committed to doing whatever we can to reduce the nuclear threat and to ensure that the next generation will be equipped with the skills necessary to manage our nuclear security into the future. The fact that other funders have gradually reduced or even eliminated their support causes us real concern, but in no way causes us to reconsider our commitment, quite the reverse. I was truly surprised on assuming this role two years ago to learn that we are the

largest private funder on nuclear security. I hope we won't remain so for very long. We at Carnegie are committed to support of nuclear security, first, because of its importance, especially at this time, and second, because of its alignment with our commitment to peace that has been present since our foundation. As everyone in this room knows, the risk of nuclear proliferation has never been higher, and the risks of nuclear detonation, either as a result of an accident or a regional conflict, have never been higher. The world order that has prevailed since the Second World War is under increasing strain due to China's – the growth in China's power and President Xi's focus on national security, to Russia's refusal to accept its diminished role in the world, and to America's commitment to NATO and to providing a nuclear umbrella being called into question. One of the great achievements of the post-war era has been that President Kennedy's fear has never been realized. This fear, expressed in 1963 while advocating for the Tespan Treaty, was that by the 1970s, there would be about 25 nuclear powers. Recent events in the Middle East have provided incentives to Iran to accelerate its nuclear program and to Saudi Arabia and others to consider their own. Meanwhile, in Europe, Poland and even Germany are considering developing their own programs and holding discussions with France about extending its deterrence in light of Russian aggression and growing American isolationism. In South Korea, too, polling suggests growing public support for acquiring a nuclear arsenal. Meanwhile, emerging and disruptive technologies in space, AI, cyberspace, and quantum are creating new pathways for nuclear escalation, blurring lines between nuclear and non-nuclear systems and complicating the future of arms control. Additionally, these new technologies are both magnifying and complicating the risks associated with nuclear weapons, given their potential role in escalation control, crisis management, and global security regimes. Meanwhile, the threat posed by major powers potentially resuming nuclear testing appear to be growing by the day. As if all of that were not enough, I have a personal concern, too. It is that the issue of nuclear weapons seems to have less salience for the younger generation than it had for mine. There appears to be a sense that there will be a technological fix. A survey we sponsored, conducted by the Chicago Council on Global Affairs, found that millennials in Gen Z are less confident than boomers in Gen X that nuclear weapons are effective in preventing conflict or making the U.S. safer. In popular culture, too, nuclear war is much less evident than it was in the era of Dr. Strangelove or On the Beach. Finally, as evidence mounts of political leaders acting against civilians with impunity in Africa, in the Middle East, and in Eastern Europe, the argument against the indiscriminate nature of nuclear weapons is weakened. Remember, Osama bin Laden used to constantly criticize the U.S. of hypocrisy by invoking Hiroshima when the U.S. complained about terrorist attacks on civilians. One thing all generations do appear to agree on is that they do not know enough about nuclear weapons and are unfamiliar with a range of nuclear issues. So with the rate of growth of the risks far outpacing the rate of growth in popular concern, we at Carnegie believe that we have to double down on our efforts to address the issue. To do so is in keeping with our long history promoting international peace. Andrew Carnegie himself was a passionate believer in peace. He built the Peace Palace in The Hague. He traveled around Western universities giving commencement addresses in which he called on the young men to join a League of Peace rather than an army. In his day, he was the richest man in the world. And he, not unlike his contemporary successor, had access to presidents and global leaders. He lobbied them constantly to try to avoid the outbreak of war. In fact, he never quite recovered when the First World War broke out. We like to think that if he were alive today, he would be a firm advocate for nuclear arms control and, however improbable, the complete and verifiable abolition of nuclear weapons

altogether. Since 1983, Carnegie has awarded over 600 grants totaling over $160 million, not adjusted for inflation, for nuclear security. Now, it may seem like a significant sum, but by compared to the vast amounts spent by governments, it is overwhelmed. But we nevertheless believe that philanthropy has played a role in reducing nuclear dangers. For example, philanthropy has funded research and dialogues that ultimately led to landmark arms control and nonproliferation agreements. The Pugwash's Conference influential role in the Limited Test Ban Treaty, the Nuclear Nonproliferation Treaty, and the sadly defunct Anti-Ballistic Missile Treaty was recognized with the award of a Nobel Prize. We at Carnegie funded research and analysis that ultimately served as the backbone to the Nunn-Lugar Cooperative Threat Reduction Program, which did so much to reduce nuclear materials, delivery systems, and much more from the former Soviet Union. Philanthropy also funded the nuclear freeze movement. And while it's difficult to assess its impact, it was certainly a player in educating the public and, through them, their representatives on the nuclear threat in the 80s and 90s. Philanthropy, while lacking the scale of government resources, does have some advantages. We can act flexibly and nimbly. We can convene, especially across ideological and sector divides. We can help to develop pipelines of experts for governments who are not investing. We can take risks and invest in experimental and innovative ideas and young, untested scholars. One example of how we at Carnegie Corporation are doing this in a sphere outside of nuclear security is through our Fellows Program. I believe that the pace and scale of political polarization in the U.S. is quite frightening and poses a threat both to our democracy and to everything we are trying to accomplish. We therefore send out a call every year for research proposals from scholars all over the country at every level and in every discipline who wish to work on this area, and we are funding them for two years. We also bring them together and introduce them to one another in an effort to spark interesting ideas through spontaneous interactions. And their findings will, in turn, influence our grantmaking. But in light of the pretty bleak picture I've just painted, what's to be done? And in particular, what's to be done by grantmaking organizations like ours? We ask ourselves this all the time. We're not entirely sure, but we want to work with others to enhance the probability that we'll get it right. We do believe that we must both endeavor to reduce the risks associated with short-term dangers where we can, while also thinking about the long-term. Let's face it, nuclear weapons are likely to be with us for many years to come. And as we know, long-term challenges require long-term investments. We believe that there is a serious need to support experts to prepare for a time when geopolitical change encourages more positive outcomes. At the same time, we need to prepare for the alternative, for long-term stasis or decline when efforts need to be redoubled to prevent the unthinkable. Practically speaking, this means helping to ensure that a rising generation, both in academia and in non-governmental community, is continuously fluent in emerging and disruptive technologies, even as they constantly evolve and reshape our understanding of nuclear risks. It's hard to imagine future arms control agreements that don't involve these technologies in one form or another. And we need our future leaders to be ready to confront the most difficult nuclear challenges the future may bring, no matter how unpredictable. And we also need to be willing to take some risks. I have heard it said that those working to reduce nuclear dangers are occasionally hesitant to entertain audacious ideas or take on novel projects that risk failure. There may be good practical reasons for this conservatism, but we believe it has to change. This takes me to the primary purpose of my talk, which is a call to action. So in the spirit of adaptation and change, I am delighted to announce a unique collaboration amongst funders to invest further in efforts to reduce nuclear dangers. This group,

which would be led by Carnegie, and has thus far pledged a total of up to $10.2 million over the next two years. Our foundation is pledging up to $4 million to the consortium for this two-year period. We are very grateful to our partner philanthropists in the consortium, Longview Philanthropy, Max Epions, Founders Pledge, and to a generous anonymous donor. This is our initial list of partners, but we are inviting others to join us. I should note that the structure of the consortium means the pledges are not legally binding, but we have purposely designed it this way to encourage maximum participation. The idea behind the collaboration is simple. The nuclear policy community has never had a coordinated joint mechanism for potential grantees openly to apply for funding and for multiple grantors jointly to review these proposals and consider co-funding projects. As you know, traditionally philanthropic support for nuclear programs and projects has been provided individually without coordinating both funders and grantees. And in certain instances, this approach continues to be valuable. But at times, we think this is also limited opportunities for up-and-coming experts in academia and NGOs to pitch their best ideas to funders outside of broader institutional funding, where ideas can often be based largely on seniority. It's our hope that this new consortium will incentivize new, bold, and innovative proposals to reduce nuclear dangers, and it will encourage collaboration between potential grantee institutions and philanthropic organizations. Now the success of this initiative is going to depend entirely on the people in this room. When the consortium gets off the ground, we will invite your best ideas on reducing the modern risks of nuclear war, including how those risks relate to emerging and disruptive technologies. If I may, I'd now like to speak directly to the philanthropic community. As you know, the risks of nuclear war are rising, and we believe that philanthropy should not stay at the sidelines. So let's be clear. This consortium is not only for funders that have traditionally focused on nuclear issues. We believe that nuclear weapons should no longer be siloed, separable from other security challenges. They are an integral part of a wider existential risk network that is rapidly evolving. So if you are focused on reducing existential risks or reducing the risks associated with emerging and disruptive technologies, you have a home in this consortium. If you're a funder interested in new, innovative proposals on the future of artificial intelligence and the nuclear threat, you have a home in this consortium. If you're a foundation interested in new proposals on the future of security in outer space, where the nuclear threat is yet again on the table, you have a home in this consortium. And if you're a philanthropist interested in working collaboratively to prevent nuclear war, I hope you will join us. In the near future, we'll be releasing more detailed information about our new strategy and about the funders' consortium and how to submit proposals and how other philanthropists can join us, and I very much hope that you will. So with that, I'd like to thank the Carnegie Endowment for International Peace for hosting this important conference at such a critical juncture and for inviting me to speak today. As Andrew Carnegie once said, the realms of reason are the realms of peace. So I hope we can all work together to preserve the realm of reason through all the vicissitudes of national, geopolitical, and technological change that are headed our way. Together, we really must do everything we can to ensure that a nuclear weapon is never used again. Thank you.

[00:18:13] Speaker 3: It's a real pleasure to host you here at the conference. I have to point out that in many decades that we've been holding these conferences, one of the most important policy lessons is that the person announcing new funding becomes the most popular person at the conference, so thank you. And the gratitude comes from recognition that one of the challenges in leading a grant-making organization, which you lead, Dame Louise, is trade-offs, that you're not in the

business of raising huge amounts of new money from external funders, Andrew Carnegie, and by the way, I'm glad we agree on the pronunciation, too, that's progress, that there's a discrete budget constraint. How then do you think about the role that this funding can have in policy with other philanthropy and society? What do you hope will be accomplished when we maybe reconvene here in two years?

[00:19:10] Speaker 2: My hope is that there will be enough money in two years to fund every good idea that comes our way. I mean, the hope is that we will act against, there has been a trend of declining interest in this field, notwithstanding the existential threat it poses to us, so we really hope to kick-start more funding to encourage other foundations and philanthropists who have moved out of the field to move into it, or people who are like us, just trying to figure out how can you most have an impact on global security. And as I said, for us, it's just the scale of the threat is so enormous, it's hard for me to see how we can say we're committed to international peace if we don't take this really seriously. But as I say, I hope we'll persuade others to join us and encourage young academics that there will be funding for their research, that they should, if they have an interest in this field, they should stick with it, that I hope there will always be funding for

[00:20:15] Speaker 3: them. When I think about your role in academia at St. Andrews, at Oxford, at Harvard before that, your role as a scholar, one through-line I see is a deep interest in interdisciplinary work, taking insights from different perspectives, using different methods. I wonder if you could say a little bit about how that's informed your approach to this nuclear issue, and more generally, your role at the Carnegie Corporation.

[00:20:38] Speaker 2: My first degree was in history, my second subsequent degrees were in political science, so that's not a huge jump. But the issue that fascinated me for most of my, still does, academic life is the issue of terrorism. And that absolutely requires a multidisciplinary approach from anthropologists, psychologists, political scientists, historians, and many others. So I suppose that's how I became committed to this field, or to bringing an interdisciplinary approach to this field. And here again, with the increasing role of new and emerging and disruptive technologies, it seems to me that we need to try to provide incentives for people who are deeply familiar with those technologies to work with the people who are very much aware of the geopolitical issues involved. And ideally, cross-train people from the beginning, because I think that's our best hope of success.

[00:21:37] Speaker 3: What do you see as potential gaps? Already in this conference, for example, there are plenty of technical experts, people who work on the policy side, who apply history a little bit, who study the regulatory side. And yet, without getting into the weeds, if you think about this from a big picture perspective, where do you see potential opportunities for progress?

[00:21:57] Speaker 2: Well, I wouldn't want to presume to present myself as an expert in this field. I'm far from it. But the particular area I've alluded to a couple of times is the link with new technologies. And I think we tend to have a great power approach to this issue. And if I were a betting person, I would say the odds of the first nuclear detonation occurring in one of the other areas, say India, Pakistan, for example, that have nuclear weapons, rather than great power competition. And I think one of the things we need to ensure is that we're not too Americanocentric when we look at this subject. But really, I would push it back to the people who know

more about the field than I do to point out to us where the real gaps are. I mean, I've come to philanthropy very late. The university president was always on the other side. And I don't see our role as going out there and creating a field. I see our role as identifying the people who are doing very good work and enabling them to do more of it.

[00:23:13] Speaker 3: I don't get you all to myself. We're going to have some questions from the audience, too. But I have one more question for you before we go to the audience. And that is, when you think about what you've learned in your journey as president of a grant-making organization and recognizing that the challenge here is not to build a field, in a way, it's to catalyze more work and more interest in an existing body of experts, maybe attract some new people in. But what lessons do you think you've gleaned from your role as a grant-making organization president that might be helpful for people working in the nuclear field?

[00:23:45] Speaker 2: Well, the first lesson, and I would have hated to hear this when I was on the other side, was just how hard it is to do this well.

[00:23:56] Speaker 3: You're telling the audience that giving money away is very difficult.

[00:23:59] Speaker 2: It is. Yeah, I know. That's not what you want to hear. And no doubt, it is very difficult. I don't actually think it's easier than raising money. When I was a university president, I obviously interacted with a lot of very wealthy, self-made people. And I always asked them, is it easier to make money or give it away? And without exception, they said, that's easy. It's much easier to make it. Now, that hasn't been my personal experience, but I hasten to add. And it goes back to your first question. It's the trade-offs in the scale of the challenges we're facing and the resources that we have. How do you ensure you have maximum impact? I feel it's an incredible privilege to have this endowment from Andrew Carnegie, but I feel an acute sense of responsibility to maximize its impact. And in a subject like nuclear weapons, it's hard to calculate impact. I made a few comments about some impacts I think we can claim in the past with arms control. If we discover we have completely failed, that'll be the least of our problems because it would have meant that a nuclear war would have broken out. So I would just say to people who work in this area to work with us and to help us figure this out genuinely. How can we, given our resources, have maximum impact in this field, which really matters to all of us?

[00:25:34] Speaker 3: I have a question here from Anya Fink that I will supplement since I have difficulty stopping my asking you questions. But the question as written is, how will the consortium measure the success or policy impact of grantees? That is a perfectly good way to formulate the question, but I'll just add to it by saying, imagine you're in conversation with another foundation president that for the moment, let's just say it's hypothetical. And that person says, you know, we were in the nuclear field for a while. It certainly had a compelling story for like why it mattered, but we just find it awfully difficult to get engaged in and stay in a subject where we can't see clear, measurable progress in achieving our goal after five to seven years. What might you say to that foundation?

[00:26:15] Speaker 2: I suspect that is the reason people have left, and my response is the one I just gave. This is so important, and there is work that needs to be done. If young people don't know anything about nuclear weapons, if they don't

really care much about nuclear weapons, I think it's just another odd technological thing that there will be some fix, then we're more likely to have a nuclear war. And so I think, you know, I think every philanthropy has a portfolio, and there are some things that you can measure very easily, like how many kids got into college because of us, how many kids graduated from high school because of what we did. Those areas, we have very clear measures. These, it's much more difficult. I would take a, in engaging with the grantees, I would take a lesson from the British Research Excellence Framework. The British government has been grappling with this idea for years with universities because university funding comes through what's called a Research Excellence Framework, and 20% of the money you get is dictated by impact. And we've had endless years and years of debate about how you calculate impact. It's really tough, but you know when you've missed it. And so something as important on this, you have to just find some measures along the way, like growing, the ultimate would be some arms control agreements that you help to facilitate, or you train the people who negotiated, or young people who have decided to go into this field because of, you know, we're spending some time educating kids at school about nuclear weapons, have decided to go into this field because their interest was generated by work that we do.

[00:27:59] Speaker 3: In a way, what I hear from your answer is that the bad news is that it is analytically difficult. We're dealing with very counterfactual situations. How might the world have been different if this million dollar grant had not been issued? The good news, though, is that in a field like this one where people are working on verification, they're working on arms control, they're working on securing nuclear materials, they're working on command and control. There are multiple pathways to making progress, at least, and one can imagine a story that's coherent in each of those. There's a question from Lindsey Rand, going back to your clear emphasis on new and emerging technologies. Part of the story you're telling here is about how, in a way, the problem of controlling nuclear weapons, making the best of nuclear technology for humanity is a very old problem, but it's constantly affected by shifts in the heartland of nuclear technology itself, how we build reactors, but also artificial intelligence, potentially even quantum information technology more generally. Say a little bit more, perhaps, about why that dimension of the problem is interesting to you.

[00:29:10] Speaker 2: Well, I think, like everyone else, we tend to be attracted by things that are new, but these technologies, we're learning more about their power every day, and so, given the nature of the nuclear threat, we just think they have this potential to be massively disruptive. Again, we want to provide incentives for people who care about AI or, indeed, are studying quantum or working in outer space to think about how that applies to nuclear weapons, too, or people who work in nuclear security to try to acquire skills in those technologies, so it will inform them, and it's just because we're facing the breathtaking pace of these changes, and I, for one, am worried that we're not keeping pace with them.

[00:29:57] Speaker 3: Leads nicely into another question from Allie Maloney, pointing out that you have emphasized the importance of engaging people who are earlier in their career, bringing them to the field to some degree, putting these issues on their radar, and the question is how CCNY and perhaps the rest of the consortium will prioritize that, and then I will quote, especially as job opportunities for early career nuclear policy researchers are few and far between.

[00:30:23] Speaker 2: No, we're absolutely, acutely conscious of this and very worried that if all the smart, young researchers decide to go in another direction, where will the country be in 20 years' time if we've lost this expertise? So we thought that, we talked about this long and hard, how do we ensure that universities are not just promoting their most senior people, that we are open to junior people, and our thinking was that, you know, as we know, starting careers, people tend to scatter all over the country but have links with people they trained with. This would be a way for them to retain those links with the people they trained with and put in a group, a collaborative group proposal, which we would be able to fund, which in the current system might not make it to the top just because things tend to go more senior. So we're deliberately trying to be slightly disruptive in providing incentives for young people to stay in this field and easier for them to get funding in this field.

[00:31:25] Speaker 3: And of course, one advantage if we succeed in this is that we won't only have talent and think tanks and philanthropy and universities, but also potentially in government. So there's a question here from Melissa Ulam about government, and in some ways it's probably familiar to you as a leader of a foundation, which is about how to strike the right balance between keeping separate from government on the one hand, but also engaging with government, potentially even coordinating with government on issues that clearly have great bearing and importance for people in government decision-making roles.

[00:32:00] Speaker 2: Well, I mean, one of the reasons that we are such admirers of the think tank world is that think tanks tend to be the people who bridge the gap between policy and academia, whose intellectual work tends to be done with more of a focus on policy. I think governments have very legitimate interests in nuclear weapons. We see no reason not to work with them, especially given the kind of resources that a government has which dwarfs anything even a consortium of philanthropists can put together. You always, you're very familiar with the problems here. You need to mine the gap, to coin a phrase, so that one isn't simply doing research work for a government, good as that is, but that one is preserving one's independence as well, so that it's not tainted by a political agenda.

[00:33:03] Speaker 3: We'll end with a question that is perhaps the flip side of the coin of the point we were discussing earlier about how there are enough issues that this field is working on that you can demonstrate impact, perhaps in different ways, but the question really asks how the consortium might facilitate a bridging of divides among people who are working on nuclear policy between those interested in arms control versus nuclear non-proliferation or risk reduction. In a way, it's sort of reminiscent of the interdisciplinary challenge, how to take people who have to focus enough to get progress, but at the same time, pulling them together and having them share insights.

[00:33:37] Speaker 2: But again, I would put that back to the grantees, say, look, if you think the problem you want to address is best addressed by having the following five people with the following five disparate backgrounds working on it, come tell us, and we'll fund it. We're not interested in the disciplinary divides, we're interested in progress and addressing the problem.

[00:34:03] Speaker 3: And I dare say this is one reason why I think the Carnegie Nuclear Conference will continue in the years to come. Sure, it will. Dame Louise, thank you for your leadership and your contributions. Thanks. Thank you.

[00:34:20] Speaker 1: Thanks. I speak for no one other than myself, but I'm sure a lot of people share the excitement at the announcement from Dame Louise that we've just heard. In her remarks, Dame Louise talked about the successes that philanthropy has achieved in the past. And at one of these conferences, we always like to take a moment to remember those who affected those successes. And so we always show a short video of community members who have passed away since the last conference. We make an effort in this to include not just Americans, not just those who have lived high-profile careers, but also those who have pursued quiet, meaningful, and impactful work. And I just want to say, help us in this task. So please do drop us a line ahead of the next conference to tell us about people who we might not think about who we should include in this video. But now, let's roll this year's In Memoriam video.

[00:35:21] Speaker 4: We still, Russia and America, live in the conditions of mutual isolation. We possess more than 95% of all nuclear weapons that exist in this world. And while we cut and cut dramatically, we still can kill each other and the rest of the world quite a few times. And management of this situation is extremely difficult. Ideally, we should overcome it and move beyond mutual destruction.

[00:36:21] Speaker 5: There are those who believe that we should stay with our great weapon, uncertainty. But I think I, with Herbert York, would argue that in a nuclear age, where much of the calculation remains to be done that is basic for the continued survival of both states and for this planet, that we really can't say that uncertainty and the necessary anxiety that uncertainty provokes is necessarily always an instrument that will play in the direction of the favor of the United States.

[00:37:19] Speaker 6: And that's what we want to do, is deter. We don't want to fight the war. We want to deter it. But right now, they exist. The other guys have them. People whose interests are inimical to ours have these weapons, and the U.S. must retain them to maintain the, what I would call, help us give us our best chance of continuing the post-Cold War security order.

[00:38:15] Speaker 7: Is a world without nuclear weapons genuinely achievable? It is achievable.

[00:38:40] Speaker 8: We've scaled many mountains in international relations. We thought that slavery could not be abolished because it was an institution that fed a lot of economies in the world, but it was abolished. We have thought that women's right to vote would not be achievable. It was achieved. We thought that apartheid was immutable, but it was destroyed finally. And so, I'm sure that we can.