

Transcript

Emmanuel Kattan, Host: If you were asked to name the key dangers that threaten the survival of humanity today, climate change, and global pandemics would probably come at the top of your list. But what about the threat of nuclear annihilation? Despite the fact that the world's nuclear arsenal has been significantly reduced since the end of the Cold War, there are still 13,000 nuclear warheads in the world today, enough to eradicate humanity several times over. And did you know that since the 1950s, there have been at least 15 nuclear close calls, incidents that could have led to nuclear catastrophe, causing the death of hundreds of thousands of people. Given the real risk that nuclear disruption still represents, why does it not feature more prominently in the public debate? Why does nuclear disarmament seem to be on the backburner when it comes to foreign policy? And why are we, ordinary citizens, not more involved in debating this threat? In order to help us cast light on these issues, Vis a Vis invited Benoît Pelopidas, Associate Professor at Sciences Po in Paris. Professor Pelopidas is the principal investigator of a 1.5 million-euro project on nuclear weapons choices funded by the European Research Council, one of the most competitive and prestigious EU grants. He's also the founding director of Nuclear Knowledges, the first academic research program in France on the nuclear phenomenon. In recent years, he has engaged with policymakers in the U.S. and Europe, as well as with civil society groups, to advocate innovative nuclear disarmament and arms control policies. Benoît Pelopidas is the author of *Repenser les Choix Nucléaires, Rethinking Nuclear Choices*, published earlier this year at Presses de Sciences Po. Professor Pelopidas, welcome. We've come a long way since the Cold War, when the nuclear threat was at the front and center of global conversations. This issue isn't as heavily discussed now. But does that mean that the nuclear threat is less significant today than it was 30 years ago?

Benoît Pelopidas, Guest: Good afternoon, Emmanuel. Thanks for having me. We have this false sense of confidence, that we've avoided unwanted nuclear explosions so far, which is then translated as meaning we've been in complete and perfect control over those weapons. And what the scholarship, including mine, has demonstrated, is that in key instances, what protected us from unwanted nuclear explosions is things that are beyond controllability. We're going to talk more about that. But so the past was indeed very risky. And we should not forget that. But even if the arsenals have decreased in size massively since the end of the Cold War, their destructive capacity remains. Just to give you a sense of the seriousness of the risk, the Science and Security Board of the Bulletin of the Atomic Scientists has set what they call the doomsday clock, which is a metaphorical way of assessing nuclear danger. They have set the clock at 100 seconds to midnight for two years in a row, which is the closest to the moment of nuclear apocalypse we've ever been at. So quickly, the few reasons why nuclear explosions remain possible. First, the pursuit of credibility of nuclear deterrence requires preparing for using nuclear weapons and communicating this willingness. So that's the first element. The second element is at the level of doctrines. NATO, as well as most nuclear weapon states, do not have a no-first use policy. Only China and India, in doctrine, say we will not use those weapons first. The third element is that scholarship about the history of the U.S. and Soviet and then Russian nuclear force sizing has demonstrated that the size of those forces, including today, they exceed the requirements of deterrence. There are additional missions. Otherwise, we would have much

smaller nuclear forces. So that also opens a way for possible use. Then we have sort of sociological evidence, where war games and crisis simulations have frequently led to the use of nuclear weapons, including in very recent years with members of the NSC staff of President Obama. And finally, there is a June 2020 Russian military document that explicitly states: those are the circumstances in which the Russian Federation will allow the use of tactical nuclear weapons. So for all those reasons, on top of which comes the luck argument, we should not think and act as if the possibility of nuclear explosions doesn't exist.

Kattan: Right. And one of the worrying factors over the last 60 years has been the number of nuclear close calls. Some of them are well publicized, like the nuclear, the Cuban Missile Crisis in 1962. Some of them less so. And the issue with these near-accidents is that they highlight the fact that control practices put in place in order to avoid an unintended attack can sometimes fail. So how significant is the risk at the level of these, these close calls, if you examine those close calls?

Pelopidas: When we talk about past cases of near-nuclear use, also known as "close calls," we're relying on declassified primary sources, and people, military personnel available for interview, which means that we're massively relying on the U.S. case, the UK case, and to a lesser extent, France. We're essentially, with the team, contributing to more declassification on the French case. But we have to keep in mind that what we've discovered about those cases, is most likely an underestimation of how many and how serious those past cases of close calls were. Just to give a brutal piece of evidence of that, the Cuban Missile Crisis, which you mentioned, which is, you know, the most studied nuclear crisis, it took the scholarly community three decades to grasp the full seriousness of it. So we should not, you know, come to think that, "Oh, we haven't heard about anything serious in the last three decades, therefore, we're totally in the clear." No, what that means is, we should realize that we are not in capacity to know of anything that would have happened in recent years. And even about the more distant past, most nuclear weapon states are still very opaque. Improving our knowledge, and improving transparency is really a common cause both for scholarship and for policy work. You know, for policy purposes, and for analytical purposes, it's crucial that we know that we can distinguish whether we've avoided unwanted nuclear explosions because we've controlled everything, or whether we've avoided it thanks to other dimensions. And so the other dimensions are modes of luck. One of them is to say: We've avoided unwanted nuclear explosions thanks to the failure of a controlled practice, you know, thanks to someone disobeying, thanks to technology failing. Second mode of luck: We've avoided unwanted nuclear explosions thanks to a factor which is independent from the realm of control practices. And third mode of luck: We've avoided unwanted nuclear explosions in spite of the failure of a control practice. So the third one is the only good news in the story, right? It's macro-level resilience, but it should still be counted as luck.

Kattan: So could you give us an example of a near-miss, or an accident, that was prevented thanks to the factors that you just described?

Pelopidas: Sure. So we're gonna go to the Grand Forks Air Force Base in September of 1980. And the Grand Forks fire is a clear case of a fortunate outcome independent of control practices. On that night of September 1980, engine number five of a B-52 on the Grand Forks Air Force Base in North Dakota caught fire in, in spite of the intervention of firefighters, kept burning for more than three hours. What prevented the fire from affecting the compartment where the SRAM-A weapons were to explode is that a strong wind kept the flames away from the weapons compartment. So this is a clear case of luck, and just one among several. Just one last element. Through interviews and archival research in France in the U.S., I found quite concerning evidence that organizations with a mandate of essentially perfect control over the weapons have incentives to cover up those events, for institutional survival's sake. And so for policy purposes, the key would be to incentivize more transparency, and to essentially learn from past bad practices and not just for from past good practices in order to improve safety.

Kattan: I'm wondering if there isn't also overconfidence in the rationality of the actors themselves, the leaders who have their finger on the button, shouldn't we also account for the mental state of leaders who have access to the nuclear codes and who are sometimes under huge amounts of pressure? Can we always trust them to make the right decision, particularly if they themselves believe that their opponent is not necessarily mentally stable?

Pelopidas: Yeah, that's one of, one crucial consideration here, and it essentially brings three ideas to mind. The first one really comes from the work of other scholars, in particular cognitive psychologist Rose McDermott, who has documented that the internal logic of nuclear deterrence does not require complete rationality on the part of all the actors. So essentially, the logic is, if you're a small state and deterrence fails, we have evidence from France and the UK that it only takes a few bombs to essentially destroy the country beyond any possible recovery. So if you know that, what's the rationality of retaliation? But your adversary in the logic of deterrence should know that you will retaliate even in that case. And so what Rose McDermott shows is that, for the whole edifice of nuclear deterrence to logically make sense, the driver has to be, and would be, anger, and not rationality. So there is an anger element, but which is very localized, right, because it supposes that everyone assumes you will be angry at that point. But at the same time, you will not be angry at any other point, because when you're faced with nuclear threats, it will create prudence. So there is an inconsistency there, in terms of, where do you assume rationality? And that's, that's really a cause of concern that it goes with what you said.

And so, if we take that back to kind of a historical set of examples, nuclear threats, sometimes they cause fear, which in turn triggers caution, which is the expectation of nuclear deterrence. But sometimes that doesn't work that way. Sometimes they do not cause fear. An earlier work of mine has shown that during the Cuban Missile Crisis, France was surprisingly not afraid, essentially because they were looking the other way. That was a week when there was a domestic referendum on whether de Gaulle was gonna stay in power or not, there was a trial of someone who tried to kill him. And there was a sense, in the early '60s, that distance was still protecting you, and that Cuba was some sort of a regional affair. So I'm going to tell you another example, which would be German Chancellor Konrad Adenauer. So you know, they're in Berlin.

They're essentially what's at stake with the Cuban Missile Crisis. So his advisers essentially say, "Oh, the budget for protection of Berlin hasn't been implemented, so we're essentially completely vulnerable." Adenauer says, "Khrushchev is just a drunk, who only understands force. Tell the Americans to escalate." Same thing. Nuclear threat, you would expect, you know, a reaction that would emphasize kind of caution and deescalation. No, you get the opposite. So we should, we should be wrong to assume that nuclear strikes will always produce fear, they will always produce caution. We have already had examples the other way around.

One last point, which is really a finding of the book. Because you've talked about leaders. And indeed, in nuclear weapons states, there is a focus on the responsibility and the control of the leader. What you see is that the proponents of reliance on nuclear weapons for security, what they trust is not the leader to make the right decisions. They trust the rationality of the chain of command in aggregate. Their belief is, in case of a, let's call it crazy order or, you know, illegitimate order, someone down the chain of command will recognize it for what it is, and will disobey. I'm insisting on that, because that's another locus for luck, right? Because the way those organizations work is that everyone is trained not to do that. But everyone expects them to do essentially this, what I call "fortuitous disobedience." And that's kind of documented in the U.S. and in France.

Kattan: So, in the turning to the role of citizens themselves, and and the general knowledge among the population of the issues at stake, your research in the context of nuclear no- the Nuclear Knowledges program, which you founded at Sciences Po, tells of a survey that you ran aimed at assessing the French population's knowledge of the nuclear issue and, and assess an awareness to nuclear risks. What are the main findings of the survey? And did you find that French citizens in particular are well-informed about the current risks of nuclear confrontation?

Pelopidas: Contrary to what we hear in official discourse, in the press, and in expert writings, there is no such thing as a French consensus about nuclear weapons policy when we're talking at the level of the attitudes of the public. Nuclear weapons are not talked about as weapons, they are talked about as 'the deterrent,' which assumes that they do deter, they do deter all the time, they don't do anything but deter, and no other weapon would deter anyway. So if you're asking a question, in terms of: "do you want nuclear weapons for protection, or conventional weapons, or both?," given that there is no discussion about opportunity costs of any of those, obviously, you get a majority that supports. What we did is that we wanted to avoid those biases. So we said, "Are you willing to have your country be a target as part of the nuclear deterrence policy to protect your country? Are you willing to have you know, your taxes, serve the modernization of the arsenal? Are you willing to have the president implement the national nuclear doctrine on your behalf?" And if you ask questions that simple, you find that the level of support, either moderate or complete, for those requests, is extremely low. That doesn't mean that there is a massive amount of the French population that opposes that. But the key finding is that most French respondents have essentially incorporated a sense of powerlessness. They've disengaged. So instead of claiming there is consensus, we should have said, we've produced massive disempowerment of the citizenry. And we find a similar finding for the UK. This is actually, I should have told you this earlier, this is a survey that we conducted in the two

European nuclear weapon states and in the five hosts. You've also asked me about the levels of knowledge overall. So, bad news there, also. One very simple fact question was, "Pick in the list, which country has nuclear weapons." So only 3.6% of respondents pick all nine. But what's important is that across all surveyed countries, over 40% of respondents tick Iran as possessing nuclear weapons already. To me, that's obvious consequence of everyone saying "proliferation Iran," "proliferation Iran" for 20 years. And that's just one example.

Kattan: That's, that's fascinating, and I'm wondering whether this feeling of disempowerment is, how does that relate to the actual fear among the general population regarding the possibility of a nuclear catastrophe? I mean, is the disempowerment so strong because the fear level is low? Or is it a reflection of the fact that ordinary citizens like like myself, feel that there are really no real levers that we can pull in order to influence nuclear policy and influence decision-making at the national level?

Pelopidas: So so I'm going to answer this question just with one more figure, which is that 39% of respondents have explicitly said, "We've never really worried about a nuclear catastrophe of any kind." And there are multiple drivers of that. There is more to be done but I really devote a chapter of the book to exactly that. We need keep in mind that since 1980, nuclear explosions have become invisible, they've gone underground. So the direct experience of them is no longer there. Then the second source of distancing, is that official experts in nuclear weapons states, the claims they make, they are not just descriptive claims. They also have a performative mission, which is to convince a putative enemy, that the existing arsenal works, that the policy is credible and effective, and all of this. So by definition, we couldn't possibly ask them about the limits of the policy or the existing vulnerabilities. But the problem is, we keep asking them as if we don't understand that, if they knew of any of those, they couldn't possibly tell. That, that's really the role of independent scholarship here, to be able to speak to those matters. And then the third source of distancing is that it's hard to believe in what we know. Those who say, "We know nuclear weapons use remains possible," even they say, "We know, but it's hard to believe, and act accordingly with that belief." And that's where I would claim that not just education, but also visual popular culture played a key role. Because during the Cold War, there are a series of aesthetic gestures that did put us viewers in a world in which it was conceivable to have this kind of disaster. And I mean, the story of President Reagan was *The Day After*. We know that the movie had a big impact. But that's not, that's not the only one. And what's striking is that post-Cold War visual popular culture essentially no longer talks about nuclear war. But the aesthetic gestures that helped us overcome this disbelief, and get to a position where what we know and what we believe are in sync, instead, we have a popular culture that no longer helps us overcome this gap. Instead, we have a popular culture that produces the sense that nuclear weapons are either a thing of the past; or things that can detonate only in small amounts, not creating the possibility of retaliation; or even irreplaceable salvation devices against an asteroid hitting the earth, even if NASA said, "That wouldn't work and we would do it differently."

Kattan: Right. And so I guess that what you're saying is that there should be an invitation to Hollywood to produce more films that are based on nuclear catastrophes that would perhaps help help us get to grips concretely with the with the real risk of of nuclear, of nuclear

catastrophe. One last question, Professor Pelopidas, how do you, you've mentioned this notion of education, as you know, bridging the gap of knowledge, popular culture, Hollywood films, etc. What are the other ways in which you can engage with the public? And, and what are the ways in which the public itself, I mean, citizens, like, like you and me, can actually influence policies and influence the general awareness of the real dangers of of the nuclear threat?

Pelopidas: The common logic is: either there is nuclear war, and then I'm dead anyway, or there is no nuclear war, and I'm going to be happier if I don't think about it. I think the point to cut through that is to say, look, even if there was no nuclear war, those policies, they have an impact on what is expected of you as a citizen. And your choice is not to be affected or not, but to be active or not, on this component of your world. And that's how I'm hoping to, you know, help bring together a generation of citizens that are clear about the choices they make, about the nuclear weapons policies they support with like, consistent justifications of whatever choices they want to make. And the second element in terms of teaching is always confront accepted knowledge about nuclear realities with available evidence. And if that sounds impossible, then that's your research project: devise a research design that will allow you to either close this gap or explain it, instead of you know, letting the gap be epistemologically insignificant. Here, that's probably a confession of obsession for consistency, because this is exactly the way I teach and the way the Nuclear Knowledges program got created. We, we observed -- we talked about luck earlier -- so we observed that there were talks about luck for five decades, but that the scholarship essentially paid tribute to them but treated those luck claims as, "We don't know how to treat them. And we're going to act and do, you know, give advice as if they don't matter." And so the key was, let's devise a strategy to become able to assess luck, and we've talked about it. Another element, and that's something that artists could do: To help citizens get the order of magnitude right. Because, and that's how you started this conversation, it's hard for for us to grasp the destructive capacity of those arsenals. So we created a one-minute video that simply compares the destructive capacity of the global nuclear arsenals today with the bomb that leveled Hiroshima on August 6, 1945, and with all the explosives detonated in World War Two, to just get an order of magnitude roughly correctly. In terms of what citizens can do, they can, I think, realize the first point that I made earlier, that they were already affected, and they have ways of distinguishing reliable sources of knowledge. Then they can write to their representatives. They can create, you know, collectives. They can connect the nuclear weapons issue with other existential threats. It's particularly striking that there is a climate movement that doesn't talk about nuclear weapons, and a nuclear weapons movement that talks about climate only in the discussion about nuclear winter, but not much more.

Kattan: Thank you so much, Professor Pelopidas. We've talked a lot about luck in the context of nuclear risk. We've been very lucky to have you over here at Vis a Vis today to share your insights, which go a long way to building our knowledge and understanding of, of nuclear risks. Thank you so much. And if you want to get dig deeper into these questions, *Repenser les Choix Nucléaires, Rethinking Nuclear Choices*, is available at Sciences Po University Press. Thank you.

Pelopidas: Thank you.