

00:00:00 Dr. Benoît Pelopidas

So, it's 12 May 2020 and this is an online interview for the ERC project on nuclear weapons governance. Thank you for taking the time to do this interview. I'd like to start by asking you to introduce yourself, please.

00:00:21 General Bernard Norlain

Yes, so, Bernard Norlain. I'm a "2nd section" general, which in France means retired. But as you know, generals in France are not retired, they are in the second section, i.e. in reserve. And so I was, I ended up as an air force general, which is to say five-star. My last operational post was commander of the combat air force, in other words commander of fighter aircraft.

Before that, I was Commander of Air Defence. And before that, I was head of the military cabinet of two prime ministers, Jacques Chirac and Michel Rocard. The end of my military career was actually as Director of the *Institut des hautes études de défense nationale*. Then I went into civilian life, as retired military, and joined Deloitte. In fact, I set up a consultancy firm. I was with Deloitte & Touche for 8 years. Come on, that's what it was called at the time, it's only called Deloitte now, and I looked after the public sector and aerospace and defence.

00:01:30 Dr. Benoît Pelopidas

Okay.

00:01:40 General Bernard Norlain

Then I was Chairman and CEO of Sofema, the French aeronautical equipment export company. And then, well, I stopped due to exhaustion. At the same time, I was chairman of the *Comité d'Etude de Défense Nationale*, which publishes the magazine *Défense Nationale*. And so, when I left, let's call it "active" life, I became - I created, with Paul Quilès, the association *Initiative pour le Désarmement Nucléaire* [Initiative for Nuclear Disarmament] of which I am the vice-president. So that's my main activity now.

00:02:25 Dr. Benoît Pelopidas

Okay, great. Well, thank you very much-

00:02:29 General Bernard Norlain

I should add that I'm a former fighter pilot and that I've flown all types of aircraft apart from the French Rafales, but a lot of American and Russian aircraft.

00:02:45 Dr. Benoît Pelopidas

Okay. And so, the creation - Did your commitment to the nuclear weapons issue coincide with the creation of IDN or did the commitment precede this -?

00:02:58 General Bernard Norlain

No, my commitment predates that. My commitment goes back to the fall of the Berlin Wall. That is to say, when the Berlin Wall fell, the question obviously arose as to what we were going to do about nuclear deterrence. At the time, I had just left Michel Rocard's cabinet as head of the military cabinet. And I'd had discussions with Michel Rocard on the nuclear issue. Well, he was Prime Minister, so of course he was, in a way, implementing France's nuclear strike force. It was normal, but we still had discussions and afterwards, so at the same time, I continued to have these discussions with Michel Rocard who had invited me to make contact with the Americans, in particular General Butler.

00:03:49 Dr. Benoît Pelopidas

Is that so?

00:03:50 General Bernard Norlain

The former head of Strategic Command, who was very opposed, became very opposed to nuclear weapons. At the same time, with the fall of the Berlin Wall, the question of what to do with our nuclear weapons came up. Since our *faible au fort* doctrine, which was, whatever we say, whatever our strike force was, in all horizons

00:04:16 Dr. Benoît Pelopidas

In all directions.

00:04:17 General Bernard Norlain

Thank you, yes. In all directions. Of course, it was still targeted, very USSR-oriented. So, what do we do about it? So it didn't take long for our experts of all kinds, often self-proclaimed, to come up with an answer: "Well, now the enemy is the dictator, the autocrat". What are now referred to in official language as "centres of power and decision-making". So, in quotes, as the military say when dealing with this kind of threat, it's no longer a question of razing entire cities to the ground, because I imagine that a good dictator or autocrat isn't really deterred if you threaten to raze his capital to the ground. So you have to attack him, his entourage, in short, the centre of power. And to do that you need specialised weapons, precision weapons, weapons with a low nuclear payload and penetration capabilities. So, from the moment you start - Well, low-power weapons have existed for a long time, but what was new was precision, specifically precision. As soon as you build this kind of weapon, it's meant to be used. This was also true of low-power tactical nuclear weapons during the Cold War, they were designed for use. It wasn't designed to deter, really, was it? It was designed for use.

And so, from the moment we use, build or develop this kind of weapon for [sic], we enter into a logic of use. Which is - which was and is still completely contrary to our official French doctrine, which is that of non-use. The whole argument is "we have nuclear weapons, we're developing them, we're modernising them, but we'll never use them because they're a deterrent and they're our absolute guarantee of security". So, I say, well, that's nonsense, isn't it? And so, we get involved in nuclear battle, in nuclear exchange. Nuclear exchange means nuclear escalation, and nuclear escalation means - well, we're taking a considerable risk of destroying humanity or a large part of humanity, the planet, et cetera, et cetera. So, I said, this position is no longer tenable. And so, we had a lot of discussions with Michel Rocard on this issue. And it just so happened that one fine day in 2009, he called me to ask me to sign an article with him and Jacques Chirac that would appear in *Le Monde* on the subject of -

00:07:02 Dr. Benoît Pelopidas

This is the op-ed?

00:07:03 General Bernard Norlain

Yes, yes. Exactly. Finally, Jacques Chirac withdrew, but Alain Juppé replaced him. And then the 3rd or 4th, it doesn't matter, was Alain Richard who was a former Defence Minister. So, we signed this article. This article has a history, because it followed on from another op-ed that had been published, so I think it was in 2017, in 2007, sorry, a year or 2 before, with Kissinger, George Schultz (Reagan's) William Perry (Clinton's defence minister). And the last one was --

00:07:42 Dr. Benoît Pelopidas

Sam Nunn.

00:07 :44 General Bernard Norlain

It was they who wrote the first four-person opinion piece on the subject. And then this four-person format, basically one soldier, one diplomat... Well, it's been reproduced, it's spread to all sorts of countries. Particularly in all the major European countries, in Italy, the UK, Germany and also in Russia, but also in China, all this has been duplicated a little on this theme.

00:08:08 General Bernard Norlain

With varying degrees of nuance. You can imagine when it came to Russia on the theme -- Well, nuclear weapons no longer have any strategic relevance and they are becoming and remain very dangerous. So we have to get rid of them -- they're becoming more and more dangerous, we have to get rid of them. So that's it. And then, well, Michel Rocard, well, that's a bit of a stretch because he said he was, he was appointed delegate for the --

00:08:34 Dr. Benoît Pelopidas

The poles.

00:08:37 General Bernard Norlain

The poles. And one day, at a conference at the Reagan Library in Los Angeles, I bumped into Paul Quilès, with whom we shared our ideas. We decided to create this association and initiative for nuclear disarmament. And that's how - I forgot to mention that before that, Michel Rocard had introduced me to a lot of specialists and experts on nuclear issues all at once. And in particular, I remember a conference in Munich, before the conference on defence, at which there was - so it was a meeting, we were at a meeting with Michel Rocard and there was Kissinger, Madeleine Albright and then some European prime ministers, former prime ministers. So, he introduced me to Global Zero, the Global Zero movement. Then I got in touch with ELN in England, then with NCI and so on. So that was before LDIDN was founded. So, well. And when I met Paul Quilès in Los Angeles, it was a conference organised, I think, by Global Zero. That's where we met up again. That's how I got involved in this crusade.

00:10:05 Dr. Benoît Pelopidas

And so, it was the meeting with Paul Quilès, I didn't know that part of the story, so it was in what, 2008, 2009?

00:10:14 General Bernard Norlain

Yes, I'd say 2010, that's a year or 2 later, 2010/2011.

00:10:20 Dr. Benoît Pelopidas

Okay.

00:10:21 General Bernard Norlain

Well, since we had to create the, it was originally called "*arrêter la bombe*" [stop the bomb]. It must have been in 2013, something like that.

00:10:30 Dr. Benoît Pelopidas

Okay, great. Well, thank you for all that. I'd never heard of Jacques Chirac being meant to sign the tribune.

00:10:39 General Bernard Norlain

Yes, yes, of course, yes, yes. That's what was so funny. So, the story, as Rocard told it to me, is that Rocard and Chirac often had lunch together, and got on very well, especially at a time when they had both been relieved of their posts, one as President of the Republic, the other as Prime Minister. So they saw each other often, and got on very well. And so Rocard had to talk to Chirac about it and the other, Chirac, was totally in favour. That's the funny thing about saying that to people who claim to be Chirac supporters, it always surprises them. But then, I imagine that Jacques Chirac's entourage must have dissuaded him from getting into this op-ed. But I have a letter in my archives somewhere from Chirac saying "I totally agree with you, but because of the circumstances, I can't take part, it will be Alain Juppé". So, I have a letter, signed and all, well it's a photocopy, a signed letter because it was addressed to Rocard by Jacques Chirac. So, it's quite amusing.

00:11:54 Dr. Benoît Pelopidas

Oh yes, no, that's it. It's very interesting. If possible, I'd like to see this letter but it explains-

00:11:59 General Bernard Norlain

But of course, I'm going to try and find it for you.

00:13:01 Dr. Benoît Pelopidas

It also explains why Alain Juppé makes this appearance and then never talks about it.

00:13:08 General Bernard Norlain

Well, no, so yes, yes, because in addition Alain Juppé, immediately afterwards, was appointed Minister of Foreign Affairs and then Prime Minister, so he found himself, well, completely included in the official policy, particularly on military nuclear power. So, there was ministerial discipline. Well, he couldn't, he couldn't take a stand, but he did. And then he moved on to his candidacy for President of the Republic. Here too, it's difficult to take a slightly iconoclastic stance vis-à-vis the traditional right.

00:13:52 Dr. Benoît Pelopidas

Yes. Yeah, and it's true, as long as he had, that's it - As long as he had presidential ambitions to come, there's the idea that under the Fifth Republic...well.

00:13:05 General Bernard Norlain

Exactly.

00:13:07 Dr. Benoît Pelopidas

Very good. But it's surprising that he still agreed to sign the thing.

00:13:12 General Bernard Norlain

Well yes, I- But I think that deep down he agrees completely. In fact, he said so several times at the time. He had said so, but then, of course, those statements were erased.

00:13:28 Dr. Benoît Pelopidas

Alright. So, before you set up the organisation, did you talk about these issues with any of your colleagues in the Air Force, apart from Michel Rocard and those circles? Were these conversations possible or not really?

00:13:53 General Bernard Norlain

No, not really. Not really because, well, the air force, if you focus on the air force, it's very, well, it's very much involved, isn't it? So, behind all that, there's the whole position of the military - we'll talk about it again perhaps, I don't know - the position of the military with regard to nuclear weapons. So, it's very much involved. So, the whole discourse, the whole narrative revolves around nuclear deterrence, the keystone of our defence, security, guarantee of security, et cetera, et cetera. So it's very difficult. So, at the time, I don't really remember having any real discussions on the subject? I remember that, at the time, it wasn't the air force, but that, as director of the *revue des forces nationales* [national forces review], we had, I might want to tell you about it, we had published an article by a frigate captain.

00:14:55 Dr. Benoît Pelopidas

Ah, but I was going to ask you a question. Yes, it's Luc Savoyant, "Faut-il renoncer à l'arme nucléaire?" [Should we renounce nuclear weapons?]. Of course.

00:15:01 General Bernard Norlain

So that's the unfortunate guy. I don't know what became of him, but there you go, so that was the only time I really saw a young, active-duty officer take a position on that theme.

Not only was it not possible for people in active duty, but even for the second section or quite simply the retired officers. Not necessarily the generals, eh? Well no, I don't think so. Ah, yes. There may have been Etienne Copel, pretty early on, I spoke about it a lot with Desportes. And then there's an Air Force general, Francis Laine, who you may know, who's very, very active on this. But it's true that this is one of the discussions that were always, even now, very difficult.

00:15:59 Dr. Benoît Pelopidas

But the Copel and Desportes cases are interesting from that point of view. That is to say, from what I know of Etienne Copel, basically he left first and spoke later. Or rather, the two things happened at the same time.

00:16:20 General Bernard Norlain

No, no, no, no, Copel left, quite a long time ago and then for other reasons, of course and on these subjects, on these subjects he spoke much later. And Desportes more often than not from a budgetary point of view.

00:16:38 Dr. Benoît Pelopidas

Yes, yes, because that's it. That's one of the questions I have. I've often spoken to General Desportes and he was systematically sensitive to the issue of "Yes, but you understand, I'm -" how did he explain that to me? He explained to me on this topic "Yes, in any case what I'm going to tell you will be perceived as having to do with a particular weapon and so there's no point". Because every time I said to him "Why don't you take a position on the strategic logic of the arsenal? For example, do we need an air component?" And he said "Oh no, I can't do that".

00:17:12 General Bernard Norlain

Yes, just as on this particular subject, it's very difficult for me to express myself. What I'm saying is that, overall, we don't need 300 charges, 300 warheads or 300 nuclear weapons. Maybe we don't need so much stuff. At least initially. But to then say, "We have to do away with the air component," would get me killed right there on the spot, am I? [laughs]

00:17:45 Dr. Benoît Pelopidas

But about that, well, not necessarily about the air component. But these positions you've taken, have you felt any effect on the relationship you have with your military colleagues? How do they react?

00:18:01 General Bernard Norlain

So, you have two kinds of reactions. Well, you've got those who excommunicate you straight away, who tell you that you're a traitor to the nation, eh?

00:18:10 Dr. Benoît Pelopidas

Yes?

00:18:14 General Bernard Norlain

Oh, yes! Oh yes, they can't stand it. They can't stand it if you challenge the belief in nuclear weapons. They can't stand it. And then there are those who say, "Basically, I agree with you. Well, it's unrealistic, yeah, but you understand, no one will ever give up. But otherwise I agree with you in principle". And then there are those who say "Yes, I agree, but I don't want to demonstrate publicly". So now there are more and more people who agree on the substance, who say "Well, it's becoming absurd from every point of view, both strategically and financially". But they're not going to speak out anyway, either because they don't want to put themselves at risk, or because they think there are other more urgent issues like European defence, stuff like that, you know.

00:19:07 Dr. Benoît Pelopidas

Oh right, it's a concern of "I can only speak on one theme at a time and I don't choose that one."

00:19:12 General Bernard Norlain

Exactly, that's it. Yes, absolutely.

00:19:16 Dr. Benoît Pelopidas

Okay.

00:19:17 General Bernard Norlain

In particular those who work a lot on European defence, the European army, all that. And now there's the European bomb. It's getting more complicated.

00:19:36 Dr. Benoît Pelopidas

Yes, but this is perhaps the opportunity because the talk of a European deterrent is so incoherent, so obviously from a budgetary point of view, that this is a case in point -

00:19:52 General Bernard Norlain

Yes, yes, but if you like, for all those who are fighting for European defence, well there you go, it's an unexpected argument, it's a godsend.

00:20:07 Dr. Benoît Pelopidas

Oh, right, right.

00:20:08 General Bernard Norlain

It's a chance to say, "Well, we're in the doldrums to build this army, this European defence, if we don't want to talk about a European army, this European defence or this Europe of defence, here we have something that costs nothing. We take the French bomb as it is and we say, there you go, it's the French and British atomic umbrella, of course, which extends over Europe". Everyone's happy. Already it's the basis, just like nuclear weapons are the keystone of security, so this becomes the keystone of European security, so everything's fine. So, we've laid the foundations, so you see, all this talk, it's a real godsend for them.

00:20:46 Dr. Benoît Pelopidas

Okay.

00:20:49 General Bernard Norlain

After that, you say to them, "Oh yeah, but hey, how's it going to happen, who's going to have their finger on it? Who's going to pay for it? Are we going to share? What are we doing with the American tactical nuclear weapons? Does everyone agree? Does Austria agree?" And then we come back after that and that's another thing. But first, there's always a declamatory and declamatory effect that plays a big part, isn't there?

00:21:15 Dr. Benoît Pelopidas

So, just before we move away from this publication in July 2009, in the *Revue défense nationale*, was that was difficult to publish?

00:21:25 General Bernard Norlain

In *Le Monde*?

00:21:26 Dr. Benoît Pelopidas

No, no, no, no, the frigate captain's article.

00:21:30 General Bernard Norlain

Oh yes!

00:21:31 Dr. Benoît Pelopidas

So, was it difficult to publish or was it a straightforward process?

00:21:36 General Bernard Norlain

No, that's it. We weren't paying attention. And what's more, it was 2009. Remember Obama's speech and all that. So, we weren't really paying attention. And we made a mistake. We should have put him on anonymous or under a pseudonym. Well, it would not have been difficult to crack, but it would've kept up appearances. We weren't careful. No, it wasn't difficult. There was no reaction from the editorial committee, not that I can remember. It just came out. It was obviously afterwards that we were able to gauge the reaction of the Navy, that it wasn't going down well.

00:23:11 Dr. Benoît Pelopidas

I'll try to track him down. I'm going to try and track him down to understand the impact on his career. I suppose it must have had some. If it didn't, that's surprising.

00:23:24 General Bernard Norlain

Yes, yes, in any case he's not spoken out again.

00:23:26 Dr. Benoît Pelopidas

Yeah. Strangely enough, he didn't speak up again. I saw that. Okay, so now we're going to do a long rewind, if you don't mind. My question is, "When did you first realise that there were nuclear weapons in the world? Was it during your early childhood? When was that?"

00:23:55 General Bernard Norlain

Oh no, that was when I was in the Air Force. I started in the Air Force when we were creating the strike force.

00:23:05 Dr. Benoît Pelopidas

Alright.

00:23:06 General Bernard Norlain

So, to tell the story: I was a young fighter pilot, and our great terror as fighter pilots was to be transferred to the strategic forces. Because the mission - the pilots who do it and the navigators and the crews who do this mission, well, they're very competent, et cetera, but it's a perfectly soporific mission. You fly in a straight line. The only point, at the time, was aerial refueling, because we didn't do aerial refuelling. You'd do an aerial refuel or two and then come in and land. So then, as it was at the beginning, and still is today, it's like it is with nuclear weapons: it was very codified. In other words, very precise schedules, flights planned in advance, two days on, three days off, things like that. The fighter squadron was still there, we were still in the '14 war, in other words it was the squadron, we flew, we did aerial combat and so on. So, it wasn't a fun mission at all.

What's more, at the time, there was a huge difference between the specialties in the air force of bombers and fighters. Bombing's the spirit of the bomber. I fly in a straight line, I drop my bombs, I come back. While trying to survive. And so, very disciplined, very formal and everything. Whereas being a fighter pilot is freedom. So, there was a contrast in the methods, in the training, in the spirit and so on. So, we didn't want to go bombing at all, we were terrified of being designated. Unfortunately, they needed a lot of crew, so people went very, very often. Fortunately, some of them managed to come back. But anyway, that was my first contact with nuclear weapons. It was, I'm ashamed to say, not at all for ethical or moral reasons, but it was for, well, professional reasons if I can put it that way. But that's not when I became aware of it. Well, I thought that behind it lay the quest for sovereignty, for strategic autonomy, and I was very much in favour of this policy.

00:25:42 Dr. Benoît Pelopidas

And it didn't - I'm thinking, when you were growing up, was it a subject that found its place at family dinner? Or you didn't talk about these things?

00:25:55 General Bernard Norlain

No, frankly, I don't remember. No, no, no, no. Well, of course, there was always the Cold War and so we lived with that threat for a long time. And the threat behind that, the nuclear threat. But I don't remember any particular psychosis like there might have been in the United States in the 50s or 60s.

00:26:28 Dr. Benoît Pelopidas

So one of the questions I ask all my interviewees, but which doesn't apply here, is "Have you ever wondered whether nuclear war is possible? Well, in a way of course you did, because it was part of the mission itself.

00:26:43 General Bernard Norlain

Yes, yes, absolutely. Yes, absolutely. And well, then of course like everyone else and especially us pilots who might have to use this weapon, of course, the ethical consequences are important. So, if you like, I've always been rather pleased in a cowardly way about not having to face up to this responsibility. When I was at my last post, I did have, for a brief moment, nuclear units under my command. At one time, what was still called the tactical nuclear weapon, the Mirages - they were already Mirage 2000s - were still under the command of the tactical air force. But then, very quickly, it was completely moved to the strategic air forces. So, I did have nuclear units under my command for a while. Several times when I started on Jaguar, I started training, because it was a squadron that was going to be nuclearized - my training covered the N-52, the bomb, et cetera, et cetera. And then, well, after that I changed straight away. So I never really belonged to a nuclear unit.

00:28:03 Dr. Benoît Pelopidas

And is it within the air force that those who are in charge of the nuclear mission end up as a separate corps?

00:28:17 General Bernard Norlain

Yes. Or well, I don't think that's the case anymore, because nuclear Rafales are now dual-purpose, as in, they are used for conventional missions. So, it's not the same thing at all. But – back in my day - yes, they were really a caste of their own. That's to say that they were in completely secure enclosures where you couldn't get in, you weren't allowed in. You'd bump into them in the mess hall of course, but that's as far as it went. We saw them because we knew them, they were still friends, but in their daily lives, well, we had nothing to do with each other.

00:29:01 Dr. Benoît Pelopidas

And have you ever asked yourself the question "What happens if deterrence fails?" In other words, what does the aftermath look like?" Or was the focus really "No, we focus on what we can do to make sure it doesn't fail and the rest - "?

00:29:19 General Bernard Norlain

Well, no, because we were doing conventional work. Obviously, the question was: "What can we do? What would happen if we had to resort to nuclear forces on the one hand, and what would happen afterwards?" Of course, that was, how to phrase it, our whole strategic context. Because in fact, the conventional forces which were reduced to their most basic form in the three branches of the military, well, they served as a supplement for nuclear weapons. So, our manoeuvre was always dual. Always, always. So of course, we thought about it, but we thought about it more from an operational angle, i.e. How effective is it? How can we get out of it? That's it. And it's clear that, from the moment that a, well, you know that better than I do, the gradual, flexible response, et cetera, the warning and all the rhetoric around it. Well, it was a bit anxiety-provoking all the same, wasn't it? [laughs]

00:30:41 Dr. Benoît Pelopidas

That's right. But that's precisely what intrigues me. In other words, how do you think about it? In other words, do we think about it by saying "Well, we'll look at historical precedents" or do we have models? How do we think about this manoeuvre that isn't taking place?

00:31:04 General Bernard Norlain

Well, if you want to talk about the military, it's quite simple. It was quite simple, it was the Fulda Gap, the onslaught of Soviet tanks, far superior in number and quantity of equipment, if not in quality. So how do you stop it, knowing that the ridiculous distance between the Iron Curtain and even Germany or Paris? How would we stop that? So, if you like, it was relatively, tactically or operationally as we say now, the thinking was quite simple. We try to plug the breach and then we throw in nuclear weapons, which don't work. The only problem was that everyone realised that all this was happening in Europe, firstly in Germany and then in neighbouring countries, including us. And that was it, and I remember that very well. So I never knew if it was simulated or not when, I think it was Rocard and Mitterrand who discovered that the targets - Because when we were in the military cabinet, we submitted the plan that was drawn up for the objectives (what the Americans call the SIOP), we submitted it first to the Prime Minister and then, of course, it was validated by the President of the Republic. And what were the targets? Berlin, East Germany. So, they were Germans. So, Mitterrand was very friendly with Kohl and so on, and he said "Well, yeah, but I'm not going to send them to your brothers". To your cousins or your brothers, I don't know. So it was - So was it really a discovery or not? Well, they did away with targets in East Germany, for example. Well, there were still targets in Poland, Czechoslovakia, everywhere.

00:33:13 Dr. Benoît Pelopidas

Yes, because Michel Rocard often said that it was the discovery of the number of targets in Germany that rather cooled his enthusiasm.

00:33:24 General Bernard Norlain

Absolutely, yes. Yes, I remember that very well. So, it was more from an operational point of view. After that, the battlefield was really us. It was Germany and France, of course, right?

00:33:39 Dr. Benoît Pelopidas

Yeah, so there you have it, a unique scenario of a conventional invasion by a massive army with superior capabilities. Right, okay. And then if we, so we make a great leap forward as the Maoists say, and we come to roughly the present day. Or let's say the creation of IDN. What scenarios do you have in mind that could lead to the outbreak of nuclear war?

00:34:16 General Bernard Norlain

So first, there are... I don't know if I should categorise them. First of all, there's the series of accidents. In other words, when I say "accident", I mean all the false alarms, the misunderstandings, the pure accidents that are likely to generate a nuclear explosion. So there's all that part. You could categorise it as "everything that was a bit unintentional". Everything to do with terrorism, for example, that's something else again. And then there's what may be happening at the moment with an escalation, like with Iran. It starts in Iran or North Korea. North Korea sends a missile that ends up close to Japan or the Hawaiian Islands. And then Trump says, as he said, "You're going to see what you're going to see. It's going to be complete and total destruction".

00:35:31 Dr. Benoît Pelopidas

Yes.

00:35:32 General Bernard Norlain

Exactly. So, after that, this is the second category: in the times we live in, a regional conflict that starts like that and is followed by a nuclear escalation. becomes very likely. Whether it's with Israel, Iran, North Korea or who knows who. It's becoming very likely, because in the world we live in we have, in addition to leaders, a team of leaders, a generation of different leaders who exacerbate the nationalism of these countries. And then – I forgot what I was doing. The third category is- I can't remember. But there you go, so what we're saying - yes, in fact! Then there's the fact that, as soon as we increase the number of nuclear weapons, we develop and modernise them. And then, yes, that's what I wanted to say. It's all about technological development. You are starting to have dual-use weapons like hypersonic missiles. You no longer know, with an instantaneous strike capability, you've seen that we're now talking about immediate war or instantaneous war. Where these missiles have dual capabilities, nuclear and conventional, you no longer know what's what and who is doing what. So all these factors add up, they don't cancel each other out, they add to each other. As a result, we're heading for a world that is increasingly sensitive in terms of the use of nuclear weapons.

00:37:17 Dr. Benoît Pelopidas

And so, I come back to what you said at the beginning. So, there was a change between the Cold War period, when you basically accepted the idea that the French weapon was a weapon not to be used, and the post-Cold War period and the change in targeting towards the centres of power, lowering the threshold for use. Is that right?

00:37:44 General Bernard Norlain

Yes, it's very clear to me. You know it, you've already said it with the new American nuclear posture, with what Putin is saying, it's clear that the nuclear threshold is now being lowered.

00:38:03 Dr. Benoît Pelopidas

Okay.

00:38:05 General Bernard Norlain

Only China seems to be adopting a rather restrained stance at the moment.

00:38:11 Dr. Benoît Pelopidas

Yes. Then we come to a part of the interview that's a bit different and also serves another purpose. We have a part, or at least my team has a part, of what we do which consists of following ideas and seeing how a concept or notion comes into a particular circle. So, I'm going to put three ideas to you, just to find out to what extent you've been exposed to that idea and how you feel about it. The first is the idea of nuclear winter. When did you hear about it, in what context?

00:39:01 General Bernard Norlain

Well, I think I heard most about it when we created IDN. Well, at the time of IDN.

00:39:10 Dr. Benoît Pelopidas

Okay.

00:39:11 General Bernard Norlain

Of course, before that, from the moment one's close, because I have been close to the whole nuclear weapons thing, you know that if you dropped a bomb or a nuclear weapon, the consequences would be dramatic, not only in terms of immediate victims, but also in terms of the environment and long-term damage. Of course that's true, but the notion of a nuclear winter itself is something I've really heard conceptualised at IDN. That's when I delved much deeper into the issues of nuclear disarmament and that's when, in the arguments that had to be put forward, the notion of nuclear winter became very important. Especially now with the environment.

00:40:07 Dr. Benoît Pelopidas

And so then it was no longer a US/Russia scenario, it was an India-Pakistan scenario.

00:40:14 General Bernard Norlain

Yes, yes, because when it came to the United States-Russia conflict, well, that was a bit far away. So what was more likely and credible was, and still is, the India-Pakistan nuclear confrontation. So, it was a way of making the concept a little more concrete. So that's really when we took a closer look at it.

00:40:53 Dr. Benoît Pelopidas

Okay, so for you the controversy over the validity of the concept has no purpose whatsoever? For you, it's an operating concept to explain the scale of the effects.

00:41:04 General Bernard Norlain

Yes, yes. Obviously, as you know, there have been plenty of experts who have said "Oh yeah, but that's all very exaggerated, it's not that much, studies show...". And the truth is probably in the middle, I don't know anything about it, but what is certain is that there are bound to be dramatic consequences for the environment. So, generally speaking, we've seen this, if only in the field tests, the, the, the, the - I've run out of words. For all the nuclear tests have been carried out in Russia, in the Sahara, in the United States and elsewhere.

00:41:52 Dr. Benoît Pelopidas

Alright, since we're talking about the tests, is the concept of, well one or other of "taboo on the use of nuclear weapons" or the idea of "weapon of non-use" -? Is this something that you have used at some point or that you find appropriate, at least to describe a period? Or not really?

00:43:18 General Bernard Norlain

Yes, perhaps during the Gaullist period, when we were still more in line with the Gaullist doctrine, I mean when it was really a weapon of sovereignty. It was a political weapon. It was a weapon of autonomy, not just in relation to Russia, but especially in relation to the United States. So obviously it wasn't really a weapon. It was a political weapon designed to dissociate us a little from their policy - and not to allow ourselves to be drawn into a war that the Americans started or wanted. This is something we have since abandoned, the mistake we made, so there you go. So, in the beginning, it was more like that, wasn't it? But then, of course, things changed.

00:43:15 Dr. Benoît Pelopidas

And when is the abandonment? Is it the re-joining of NATO's integrated command or is it before that?

00:43:22 General Bernard Norlain

That was before, in my opinion. It was before, when we hadn't really rejoined NATO yet, but we were like- Well that was illustrated by the First Gulf War. Basically, you could say that's when it started. We no longer designed military operations without being part of a coalition dominated by the Americans. So, our defence policy and our foreign policy, which are closely linked, were completely subordinated to that of the United States.

00:44:05 Dr. Benoît Pelopidas

All right, then. The other category I wanted to ask your opinion on is the notion of luck. Is this something you use? Does the idea that we at times avoided nuclear war or nuclear accidents through luck seem relevant to you?

00:44:24 General Bernard Norlain

Yes, that seems very relevant to me. That's what I always say, because I say, "Oh yes, but look, it saved us from a third world war, we have peace". I say, "But wait, we were lucky." But the problem is that I think that's exactly how it happened, we were extremely lucky. But it doesn't work. It's an argument that doesn't really hold water. Because, if you like, the myth of "peace is preserved by the bomb" is stronger. And that's what's terrible. So I don't know how we can find a more, I don't know how to put it, more concrete way of presenting it.

00:45:16 Dr. Benoît Pelopidas

Yes, because yes, in fact, we can't break the link between fear and deterrence, and so, yeah, that's it.

00:45:25 Dr. Benoît Pelopidas

Since we're talking about fear, the next question is about exactly that. Do you - And of course, you can tell me if you don't want to answer. But I'm interested in knowing whether at any time you felt great anxiety or some kind of fundamental fear about the possibility of nuclear war?

00:45:52 General Bernard Norlain

Honestly? No. So now, of course, as we get more and more involved in this issue, we realise that we're really, as the saying goes, on the brink of the abyss, aren't we? That we're dancing on the edge. But it's true that - and I look around me in everyday life - it's a subject that interests few people because they're not aware of it.

So the pandemic, for example, yes, people are aware. Even in an exaggerated way. But here, while the risk is much greater and the consequences much more destructive, no. I've tried to think about it a bit. First, there's a reason. We're also a bit of a victim of our own reasoning. In other words, we always present the nuclear apocalypse, total horror, Armageddon, et cetera, et cetera. And then people say, "There's nothing we can do about it. If it's fate, if the apocalypse is coming, what do you want us to do about it?" It's so abstract, it becomes so abstract, so enormous, so gigantic.

00:47:05 Dr. Benoît Pelopidas

And then it produces a feeling of powerlessness, too, perhaps?

00:47:08 General Bernard Norlain

That's it, I produce a feeling of well-being, so it's far away. It's so frightening that, well, in the end it's not frightening any more.

00:47:16 Dr. Benoît Pelopidas

Yes, that's right.

00:47:17 General Bernard Norlain

And that has a lot to do with it. And what's more, there's nothing we can do about it. Can't we? If you want the Apocalypse, there's nothing you can do, it's God. The end of the world, that's God, there's nothing you can do about it. And it's also true that it all comes down to the same thing, but in everyday life, we live very well with that.

00:47:43 Dr. Benoît Pelopidas

Yeah, we're actually able to shut it out.

00:47:47 General Bernard Norlain

Yes. It was only in the 50s and 60s in the United States that the danger was really staged by the public authorities. And then there was also the missile crisis in Europe. But since then, there have been no major demonstrations on nuclear things.

00:48:09 Benoît Pelopidas

That's true.

00:48:10 General Bernard Norlain

The nuclear threat in any case.

00:48:12 General Bernard Norlain

It's true that it's a bit like now, with the emergence of these global issues because, if you think about it, the atomic bomb is the first global threat. In terms of humanity, it's the first time that humanity has given itself the capacity to destroy itself. This is the first time that mankind has been able to destroy the planet. But now we see others appearing. We see the environment. Man is in the process of destroying himself, biodiversity, everything to do with the environment, climate change. You've also got all the health issues, because epidemics are nothing new, but it's the fact that there is globalisation, that it's both global and immediate, if you like. Before, the plague had been around for a while, then it was local, then it moved to one place, and then.... But now it's the whole world and it's immediate, in 3 months it had all shut down. Then, I'm going to add other issues, which are economic and financial, and everything to do with the 2008 crisis around financial deregulation, financial flows. This is a global threat. Then there's everything to do with cyber, which is also a global threat, so tackling these global issues changes the framework a little. And it allows the public to become a little more aware of the fact that, well, there are major threats and that, well, the first of them, unfortunately, is nuclear. That's immediate. The environment is a few years away, and so on.

00:50:01 Dr. Benoît Pelopidas

I'll come back a little to the French framework - before coming back to the French framework, since we were talking earlier about the scenarios in which nuclear war could occur. Do you think that an accidental explosion of a nuclear weapon is possible?

00:50:20 General Bernard Norlain

Oh yes, yes, yes of course. Yes, of course. Well, just look at what happened in previous accidents. You can see that, you know, when planes were carrying bombs, there you have the whole scenario that almost all the safety devices were blown. So, there's bound to come a time when all the fail-

safes go wrong if we don't take more precautions. So that's it, yes. And then there's the Petrov case, the false alarms, that too, eh? As everything is computerised, and I don't know if you've noticed that more and more people, especially the Russians, are using computers. But I think that the Americans are now saying, we need to automate the command and launch systems. So, as we have to be faster and faster, immediate and so on, in the end, firing decisions are going to be automated. Then you can imagine the risks of a nuclear explosion?

00:51:32 Dr. Benoît Pelopidas

Yes, so I'll do the confessional. In relation to that, I'm trying to bring up an article that I thought was great from 1961 by Léo Szilard, called "The Mined Cities". He says, "If you really believe that we have no means other than nuclear deterrence to guarantee security, all we have to do is put one under each presidential palace and automate everything". But then you don't need 13,000 weapons, you need one weapon for each capital and that's it.

00:53:12 General Bernard Norlain

[laughs] We're almost there, except that we'll have -

00:53:15 Dr. Benoît Pelopidas

But the problem is that we're going to have more than two.

00:53:15 General Bernard Norlain

More than one, yeah.

00:53:22 Dr. Benoît Pelopidas

Okay, so that's for the accident. The other goal is, because I'm rereading Lucien Poirier at the moment and Poirier's axiom, according to what he calls "the rationalising virtue of the atom", the idea that it makes one rational, others would say prudent. Does that seem correct or provisional to you, or just wrong?

00:53:50 General Bernard Norlain

It sounds right, up to the point where it becomes wrong. It's always the same. It's all the talk from, even Tertrais and all that, who say "But you have to realise, it's the wisdom that comes back to nations, it makes them cautious". Well that's all very nice, but it's a gamble. It's a gamble. You don't bet on rationality, do you? The other can be irrational, and so if it's the fact of transforming a bet into a certainty. So, there you have it, in my opinion, that's where it goes wrong, where the reasoning goes fundamentally wrong. I mean, in the discourse, from the moment you say "Oh yes, that gives us a 90% chance of avoiding a war". Okay, maybe? But when we say, as we do, "It's absolute security, it's your life insurance", then what we're doing is transforming odds, a percentage, into absolute certainty. And so, I think that Poirier's reasoning - So then you say "Yes, but look at what happened, we had, suddenly, India and Pakistan didn't, didn't use nuclear weapons, Russia, et cetera, et cetera." We can already discuss the reasons why they haven't used nuclear weapons. And then, as we say, well, just because an event doesn't happen doesn't mean that we can attribute the reason for certainty to some process. So there you have it, I think the reasoning is flawed at the base, and if you build a whole edifice on a foundation that is already a little fragile, one day or other it will collapse, that's for sure.

00:55:03 Dr. Benoît Pelopidas

And do you feel a- Because in, if you like, in the camp of the supporters of deterrence- And I even remember hearing someone who was rather a very kind gentleman, who was Bernard Site, say to me "Oh yes but you don't realise, the cult-" his, his word, was "the culture of deterrence is being lost, so we must re-cultivate the next generation so that they understand that deterrence is for their own good." Okay, well, I understand why institutions need to do this. Because they have to justify their existence, but this idea of, how shall I put it, a generational change in attitudes, do you see it? Because I'm not at all sure that it actually exists.

00:55:59 General Bernard Norlain

No. What, the change or the -?

00:56:01 Dr. Benoît Pelopidas

Yes, the change. The idea that there is a generation that had a solid culture of deterrence and that it is being lost.

00:56:11 General Bernard Norlain

No, I think that means, I think it's actually more general. It's a question of culture. It's all the nostalgia for military service and the link between arms and nation et cetera. Well, they're not always wrong, of course. But it's true that I think there's a move away from military thinking, without using big strategic concept, but people are less concerned, at least about defence. So there you have it. Well, it's clear that if you talk about the concept of nuclear deterrence to the average person, well, they'll look at you with blank eyes. They don't know what it is. Well, we'd talk to them about bombs, yes, they know what that is, but that's it. So I think that's more it. And then there's also the fear that they won't understand. Because young people are mobilising. Social movements are becoming increasingly important in strategic management, aren't they? Because I think this is something that will have a major influence and effect on strategic concepts and the strategic situation. I mean, the fact that social movements which, well, this could be the gilets jaunes, but it could be what happened in Syria, in the Arab countries, it could be what is happening in African countries with people who can no longer stand having leaders. So it doesn't seem to be anything new, but I think that with the media and social networks, it's all starting to take hold a bit like mayonnaise and so we're going to have to be very careful about this kind of and so it's true that. In this context, the concept of nuclear war and deterrence and all that, well, it's no longer part of the culture of the younger generations. And so I think that's why they've launched these big, well-funded university programmes to try and intoxicate a whole generation.

00:58:19 Dr. Benoît Pelopidas

For me it was surprising. They did everything at once. The programme at the ENS, which is presented as a university programme in which there are no researchers, and the RNS network, the new generation. It all appears at once, but it's very strange. Is it because they felt threatened or...?

00:58:47 General Bernard Norlain

Yes, yes, yes. I think that in the context of thinking about research, think tanks, the armed forces, everything to do with the military academy and all that, they must have thought that there was a lack of interest in these issues. And then it's especially the fact that there was contestation around Obama's speech and in the years following the end of the Cold War, there was a demobilisation. As you know, everyone lamented, "Oh yes, we thought the war had disappeared from Europe".

00:59:37 Dr. Benoît Pelopidas

Yes, the peace dividend.

00:59:38 General Bernard Norlain

Peace dividends and all that. They said to themselves, this is it, people are completely demobilised, something has to be done. And this crystallised around the nuclear issue in particular, the military nuclear issue. Where they went wrong was that if they had included this in a broader programme, in a more general reflection on safety issues, it might have been better. But the real aim here is to revive the nuclear idea. So, there you have it, and there must have been meetings. I'll leave you to imagine the meetings at interministerial level, with the national education authorities, teachers, universities, the military and so on. And they came up with this kind of programme.

01:00:20 Dr. Benoît Pelopidas

Yeah.

01:00:21 General Bernard Norlain

Oh yes, it's an action, really, it's a strategy.

01:00:24 Dr. Benoît Pelopidas

It sounds like a very concerted effort. Yes, that's very worrying.

01:00:26 General Bernard Norlain

Absolutely. Yes, yes, yes, yes, absolutely, it's a general offensive.

01:00:31 Dr. Benoît Pelopidas

And so, I also wonder if they're not wrong. In other words, in relation to the diagnosis, I have the impression that the population had already been put to sleep during the Cold War. It's not as if they were wide awake at the time and then suddenly fell asleep with the fall of the Berlin Wall. On national defence and the army-nation link, maybe, but on the nuclear issue, I don't have the impression that after the end of the 60s the French population was awake at the time.

01:01:04 General Bernard Norlain

No, no, no, no, absolutely not. But there's a question of opportunity. And then there's the nuclear issue. In other words, it's true that they were afraid that with the demise of the USSR, people would no longer be convinced of the "need", in air quotes, for nuclear weapons. So that's really what polarised them. That's it. And then all the speeches, all the rhetoric we heard was "Oh yes, but you have to listen to Védrine then, yes, but the goody-goodies thought it was over". History is tragic of course, everyone knows that history is tragic. You don't need dividends and peace to know that history is tragic, do you, or to have forgotten it. Everyone knows it even in everyday life. We know that it's all so never a long quiet river. So, it's just part of everyday life. So, there you go. In my opinion, I agree with you a little. They embarked on something that was the fruit of their own minds, of their own thinking, but which doesn't necessarily correspond to reality.

01:02:21 Dr. Benoît Pelopidas

Okay, so we're coming to the end. I was just curious to know what can be done institutionally to prevent or, at any rate, to contain this, how shall I put it, relentless repetition of the same old things?

01:02:45 General Bernard Norlain

That's the whole question: what do we want, how can we try? Well, I think so. First of all, we absolutely have to fight the ideas of utopianism, naivety and pacifism. Because, well, that's the forbidden word, in France in particular.

01:03:11 Dr. Benoît Pelopidas

Okay, that's the ultimate anathema.

01:03:16 General Bernard Norlain

And then you really have to try and work on the younger generations, because they're not intoxicated. Their brains aren't yet as hardened as the whole of my generation, which has lived in the cult of the bomb, and then under the highest patron, the poor fellow, he must be turning in his grave, it's the unfortunate patronage of De Gaulle who invoked every two minutes the very thing he fought for when he was in charge. It's scandalous. It's unbelievable, eh? Anyway. So - where did I see this the other day? Ah, it was funny because there was a guy who- So, what were we saying? We were talking about consensus. Well, it wasn't the nuclear consensus at all, but it was a consensus. And he said, "The consensus is Pétain". So if I found that... So, every time I pull it out now, every time he talks to me about consensus, I tell them their consensus is Pétain. So, it's quite funny. So, we need to work a lot with students, academics and young people. And a lot of work with social networks. I think that's the best way. It's the only way. Because the only parliamentarians who listen to you are the ecologists. Well, that's not bad, but in terms of political classification, so far, claiming to be close to the ecologists was a sure death sentence. So now the communists, too, there's still a label. So, the problem is to find members of parliament who share our opinions. So, we have to try to deploy a strategy at all levels. But I think that if you look at the media experts, the disasters, *Le Monde* is a disaster. Television and all that is generally a disaster. They have no culture whatsoever, so they cling to what they've heard, to the dogma. And it's all downhill from there. They're not interested. So, we have to try, and I think that young people really have a way to go. Because, well, when you talk to young people- So a while they change, young people, it's always the same, when they start to enter professional life. I had interns who joined the Navy. So obviously there's no question of saying that they're against nuclear weapons. So, there you go. But it's already, I think it's really on that side that we need to try to be the most active, without neglecting the other sides because the decision-makers still need to be involved. So is the current situation where everyone is talking about the world to come, about what the world is going to be like afterwards, perhaps there's something there that we should try to shift, we should try to intervene there. I don't know if you've seen Nicolas Hulot's proposals, there's not a single mention of nuclear issues.

01:07:18 Dr. Benoît Pelopidas

Yeah, it's surprising, I was hoping he was going to say something, but no.

01:07:22 General Bernard Norlain

Not even civil nuclear power, eh?

01:07:23 Dr. Benoît Pelopidas

No!

01:07:30 General Bernard Norlain

So, there you have it. It's a bit complicated, but it's complicated, particularly in France - obviously we're not talking about countries like North Korea, but even in Russia, people are often more open. [laughs]

01:07:31 Benoît Pelopidas

And I said to myself, because I went to give a presentation at the école de guerre recently and I found them better than, well, civilian interlocutors. The CEA is the worst. So when they asked me questions, they said "Oh yes, but you want to, you're against us." I don't know - And so I turned the stigma around and told them "No, no, you see, what you want to do is put me in a box so that you don't have to listen to what I have to say. So let's take the same approach, don't even put me in a box, let's discuss what I have to say and then we'll see." And so I found, well, I was pleasantly surprised. In fact, I said to myself, the military ethic and the concern for readiness to sacrifice and all that, it could be a rallying point. But then I had some people say to me "Ah, but the problem is that those who are destined for a phenomenal career actually hope to have a second career as a consultant in industry. And if they say anything against nuclear weapons, it's going to jeopardise their chances of..., 'reconversion' isn't the word but their "chance of consulting"." I hadn't thought of that. But is this anticipation of a second career really there?

01:08:49 General Bernard Norlain

No. It's there when - No, frankly, no. Now, wait, the answer is a bit more complicated. No, frankly I wasn't thinking about my career change, even when I was a colonel or even a young general. On the other hand, when you're about to leave, yes. So... but before that, the problem was that there was - well, I can see how it happened. There's a, how shall I put it, a link between the industrial world and the military world, especially in armaments, in weapons that are a bit technological, like perhaps aviation. I worked with Dassault all the time, right? Even when I was in the military cabinet, one of my big jobs was promoting - because I thought it was a good thing - but it was still promoting the Rafale. So there's an overlap. Then it's up for debate whether it's a military-industrial complex or not. But there is a very strong interweaving of the two. And of course, when you're there, you see all your former colleagues who are advisers to the chairman of Thales, advisers to the chairman of Dassault, and so on. So and so is in charge of such and such a system at Dassault, or at Safran. So, there's this very strong interweaving which effectively tells you, even if you're not from that perspective, you're still saying that here's the thing - it's not even a question of, how shall I put it, of interest. It's a question of "Well, we're all working for the same direction, so there you go, we're not going to try to, we're not going to disrupt the thing." You know? So there's a bit of that. Because when you're young you don't think about that. But now generations are changing too. I've never worried about what I was going to earn, about what I was going to do. It never crossed my mind. But now young people will have changed, they're not the same. They're not the same. So, having said that, there you go. So I think there's a basis of truth to what they're saying all the same.

On the other hand, they're also more open, more flexible, aren't they? The young colonels you've met or commanded, it doesn't matter, they're still more open. So there. It's a bit less, they're a bit psychorigid on this issue. But I remember - with Rocard - being at an adjustment. We were also invited to SCEM, the centre for colonels who are going to become generals. And so, he was very attentive. But we didn't seem to shake them for a second, you know? I think they're changing a bit now. And what's more, he can see what's going on. It was the Cold War period or the post-Cold War period,

when we were still looking at a major conflict like the Cold War. It wasn't at all the same as now, when all these officers are involved in hybrid or asymmetric operations, or whatever, and they realise that nuclear weapons aren't going to solve the problem. So, in concrete terms, they see that making circles in the water or in the sky is all very well, but it's not going to help them much. So, there's also a change of professional, of mentality and simply in the way operations are conducted.