Unedited Transcript

Moderator: Dr. Heather Williams is usually a lecturer in the Defence Studies Department Studies for Science and Security Studies at Kings College. She served as a special advisor to the House of Lords International Relations Committee inquiry into Nuclear Non-Proliferation Treaty and Disarmament. What does the Western way of warfare mean to you?

Heather: First, Peter, thank you so much for the invitation to be here and for that really kind introduction. I think that anytime I give a speech, I might ask you to be my hype man, that was really nice. To your question, I actually have a confession to make with this question. I wrote up an answer to it about a week ago and felt pretty good about that answer. But then, I listened to a brilliant episode that you did with Laura Schousbo from the Royal Danish Defence College a few days ago and in that episode, Laura listed a whole host of stereotypical definitions of the Western way of war and I looked at my list and it perfectly matched. And then, she said why all of them were wrong. And so, I was like, 'I think I need to go back to the drawing board and think about this a bit more.' So, after a bit more thought, and thank you for that episode and that intellectual exercise, I came up with three things.

The first is-, I really want to reinforce something that many of your guests have said which is that when we say the Western way of war, a lot of the times we are talking about America and I think we just have to call that out and acknowledge it. And, it's often used anonymously with the West. There are some differences. I'm sure that a lot of French scholars would take issue with me starting on this point but in that sense, when we say American, we often mean that it's fluid, it's dynamic, it's changing a lot.

The second way that I would define it is this is largely informed by my time in Europe as an American, so I've lived in Europe for a decade, and it's that we, as the West-, this is not just an American trait, we really don't like to go at it alone. We like to know that our friends are either coming with us or that they have our back or that they support us. That means we like alliances, we like rules that we all agree to, we really like consultations. We care about what each other thinks. We want our actions to be principled and to be backed up by others. This can be-, sometimes it's about defending ideals, sometimes it's not quite as lofty (ph 05.48). But, just to say, it's not just about public opinion. It is also about our opinions of each other as the states, however we're defining it, that make up the West. So, that's the second one, we don't like to go it alone.

And then, the third is something that I would say is much more American than some of the other countries that we might talk about which is what I think is an obsession with quantitative and material dominance. We don't just want to have the best of the technology. We want to have the biggest and we want to have the most of it. From the American perspective, I think this is quite understandable because the US perceives itself as having really unique, strategic priorities because of our allies, because of the extended nuclear deterrent, but also just extended deterrents within NATO. And so, that really means that it's not just about dominance or the decisive use of force, it's also about the show of force and that quantitative aspect to it.
which is, to some extent, an aversion to vulnerability or an aversion to the perception of vulnerability by both our adversaries and our allies.

So, the first is, the way of warfare is fluid and it's changing. Second, we don't like to go it alone. And then, third is an obsession with quantitative material dominance.

Moderator: As we've seen, the Schools of Warfare used to be all very separate things and merged together and the West followed the US in their doctrine, as well as their nuclear doctrine as part of the Western way of war. But, the question remains of how fluid our doctrine was in terms of the utility of nuclear weapons. We don't like to go it alone but yet in nuclear terms we have gone it alone in different parts of it whilst the doctrine has remained the same. And therefore, do we have this superiority regarding nuclear as being qualitative or quantitative? Is it enough and is it sufficient? We tend to regard the the Western way of war as conventional and not put the nuclear part in it and there are different conversations about the use of nuclear weapons in terms of the Western way of war and how conventional war can be perceived. Do you agree with what I've said or do you think I'm off the mark?

Heather: I do think that's right. I first want to make a comment on the historical aspect and then come back to that because I think it's a really important point. But, the historical aspect, I do think that nuclear doctrine has been fluid but that's because it's had to be, it's that your doctrine has to be fluid in response to your adversary and if you look at the dawn of the nuclear age in 1945, that was the first test but the use-, that the US had to go from having a nuclear monopoly. That's going to mean a certain type of nuclear strategy. Then, you have the Soviet test and that's going to require a change in that. And then, you have China and then, the Alliance keeps growing and the nuclear technology itself keeps growing. So really, that doctrine and the nuclear way of war as we think of it which is-, the nuclear way of war is, let's not use them. The nuclear way of war is deterrents and I want to come back to that as well. But, that's the reason that (TC 00:10:00) it's fluid is because it is in response to not just change in geopolitics but also to changes in your adversaries capabilities and then also to the technology itself.

And so, just to make this point on deterrents, that this-, it is funny when we think about it. In your intro, you said how nuclear weapons, we do have to think of them as one extreme end of the spectrum on the use of force. But, we don't often and I actually think that this is a really tricky nut to crack because on the one hand, yes, they are in the toolkit and, yes, we have to consider the potential of their use. But, the whole point is not to use them and the reason for that is because of the massive destruction and humanitarian catastrophes that they could cause. But, I think that that is changing a bit whereas before during the Cold War, the thinking was, 'Oh, the Soviets have this conventional superiority therefore we need to balance with the nuclear.' That's flipped now and Russia is obviously thinking of it as, 'Oh, we really need to,' and they have, to develop their nuclear capabilities because of US and NATO conventional superiority and that you always have that see-saw effect.

I really think that that is gradually changing because of these technologies in particular. A lot of that has to do with more mobile missile technology. Russia, in particular, has invested a lot into dual-capable systems. So, if you see a cruise missile coming at you, is it a conventional warhead or a nuclear warhead on that? But then also, when you start adding things like AI or cyber, that really is starting to change the calculus and the way that, I think, we think about that spectrum of violence so to speak with nuclear at one end.

Moderator: Thinking about the fact that the West is uncomfortable with putting nuclear weapons onto the battlefield, when NATO started to put nuclear weapons back into their exercise programme and reinforce the idea of the utility of nuclear weapons, this was an enormous step, wasn't it?

Heather: Enormous. I'm not sure the scale I would put it at. But, you're right. It was a noticeable change. However, from my perspective, that was in response to Russia's aggression and a seeming, increasing-, Russia's own willingness to use nuclear weapons. There's this ongoing debate, does Russia have a doctrine
of escalate to de-escalate? I don't think that that's an accurate characterisation of it but it has certainly gained a lot of traction in the West where at large this idea that if Russia is losing a conventional conflict in Eastern Europe, that they would use nuclear weapons to signal their resolve and to try to end the war on their own terms. If that's how you perceive Russia's nuclear strategy and mentality, you're going to need to step up your own nuclear signalling. I hope I've accurately captured the logic behind that.

But then, to this question of-, you've really got to the heart of a question on nuclear weapons that has been going on since the dawn of the nuclear age and rages until this day, are nuclear weapons a war-fighting weapon? And, during the Cold War, there were these nuclear artillery shells. If you are interested, you can go on YouTube and see these videos about nuclear artillery. It's kind of crazy to think of now. But so, the idea, as you said, we always think of it as, 'Nuclear weapons are just there for deterrents.' So, there are nine countries that possess nuclear weapons, only two of them have a No First Use doctrine which just means we would not use nuclear weapons first in a crisis, they are only there for deterrence purposes. And so, those other seven which include the US, UK, and France, we have to start asking, 'Well then, what are the other purposes? If it isn't just for a deterrence, why else do we have them?' And, I know that during the previous US administration, there was a particular reluctance to adopt a No First Use policy largely because of North East Asia and saying things like, 'Well, if there was a nuclear war in North East Asia, we could decisively win that.' And, it's like, 'Well, yes, but why would you want to use nuclear weapons to do that? You don't really have to.'

So, I'm not saying that now is the time for No First Use. I actually don't think that it is but that's largely for signalling purposes and because nuclear weapons have taken on this really important symbolic role, particularly within NATO and for America and its allies.

**Moderator:** Do you think that there is a good deal of mythology around nuclear weapons because the doctrines of such weapons are so highly classified or is it because people in the West are pretty uncomfortable discussing it?

**Heather:** What a great question. I think that the misperception depends on who it's about. There are some incredibly smart people in Washington who really do understand Russian nuclear doctrine. For anyone interested, I would highly recommend people like Sam Charap at RAND. I think he's one of the best on this. And then, also at the Centre for Enable Analyses (ph 16.25) and they've come out and explained that this is not escalate to de-escalate. Russia itself came out- I believe it was August of last year, they released their first standalone nuclear doctrine, the foundations document I call it, because the actual name is I think just way to long for me to remember.

So, the foundations document basically says, 'We do not have an escalate to de-escalate policy.' Since then, I have talked to plenty of people in the DoD who say, 'Well, Russia has an escalate to de-escalate policy.' So, I think part of it is that these terms just catch on. I also think that there is this deep-seated and understandable sense that for a lot of people, the Cold War didn't end, that Russia is still the primary adversary. Russia doesn't always help themselves in changing that perception but I think that there are a lot of those deep-seated concerns and, in particular, if you look at Russia's-, as I said, their dual-capable missile technology production, they are just finishing their major round of nuclear modernisation. It has been quite clearly been developed in response to NATO and the United States.

So, as I say, I do think that this misperception is somewhat understandable but around escalate to de-escalate, enough people have written about it. People who I think know a lot more than I do on that topic. But, that's just the Russia case. We can look at plenty of other nuclear threats that I think we haven't always got it right and perhaps the trickiest is going to be North Korea because it's just so hard to really understand what their incentive structure is. We think that we understand it but do we really? And then, again the ally considerations come into play and just to keep harping on this point about how for the US, there's always
that added layer of complication of the allies where Washington might have a really clear picture of Russia's nuclear capabilities and Russia's nuclear interests. All it takes is a call from the Estonian Minister of Defence that might have that impact on US strategic thinking.

**Moderator:** There are big changes that are happening technologically such as mobile missile technology, like dual-use systems, and AI. These are both huge topics to squeeze into something that is already a variable, i.e. a nuclear doctrine or understanding of nuclear doctrine, and perceptions about how rational and irrational actors behave in certain scenarios. Do you think this is fraught with danger of miscalculation?

Heather: I think so. Speaking about mobile missiles first, that this is just one trend, one aspect of the trend towards increasing ambiguity in (TC 00:20:00) nuclear doctrine, so strategic ambiguity, which is interesting because usually when we say strategic ambiguity in the nuclear field, we mean it about declaratory policy. So, you don't specify exactly what are the conditions under which you would or would not use nuclear weapons which is the opposite of that No First Use doctrine that I was talking about. But, the reason why it is a little bit ironic is because China is one of the countries that has a No First Use policy so you would think, 'Oh, they're really clear on their declaratory policy.' No, they're the ones who have developed the most sophisticated and (inaudible 20.32) perhaps on mobile missile technology. So, that injects that ambiguity into there and a lot of my research is on arms control and the idea of designing arms control to really capture mobile missiles is going to be a tough one for us to really figure out if at some point we do want to incorporate China into arms control agreements.

But, turning to AI, when we talk about these technologies in the nuclear context-, I am sure that I'm going to upset a few people with what I'm about to say here, but it’s always doom and gloom. We always focus on how AI in particular is going to increase nuclear risks. There’s The Campaign to Stop Killer Robots for example. They are slightly different domains but you have a lot of experts coming out and saying, 'Trying to incorporate AI into nuclear (inaudible 21.26) control is just so risky. You have to keep a human in the loop.' I agree with all those things. However, there is also a potentially stabilising role for all of these technologies. For example, with AI, because of improvements in satellite technology and intelligence collection, we are just flooded with data and it’s really hard for humans to process that amount of data. But, the application of AI for pattern recognition for example, I think, could prove really helpful in arms control verification. This is a distant-, maybe not so distant, but this is in the future, I'm not talking about right now. But, having in (ph 22.08) that type of improved verification or just using it to try to increase our situational awareness if you're in a crisis, but also trying to increase our understanding of that adversary.

So, those misperceptions, Peter, that we were just talking about, can AI help improve our intelligence collections so that we have a better understanding of those adversaries? And so, I always just want to caution that when we talk about technology-, technology isn't necessarily good, it's not necessarily bad. We really have to hone in on what is the specific application that we're talking about. And, I think the nuclear community understands-, because these weapons are just so horrific, we automatically do usually think about, 'What is the worst case scenario here?', because we have to. And, we do jump to that worst case-, what is the worst possible thing that AI with nuclear weapons could do? Yes, those are concerning but we also have to consider that other side of the equation.

**Moderator:** Is it possible that AI could be used as a significant tool in generating stability in nuclear relationships?

Heather: Absolutely possible. It does depend on how they develop. The one area where these developments in technology do consistently worry me a bit however is if they're compressing (ph 23.34) decision making time. So, this is going to be particularly true for countries with smaller arsenals. So, if you have a relatively small arsenal which could be 100, let's say, do you have to be really worried about the possibility of a disarming first strike? So, if somebody else attacks you first, they wipe out your entire nuclear arsenal and
your ability to respond, that creates a use it or lose it scenario. So, you might be incentivised to strike first while you still have them.

That type of calculation if you have-, in the way that a lot of these technologies compress that decision-making space, a war is just going to happen so much faster. Are people still going to be able to make sound, reasonable, stabilising choices with less decision-making time? That’s the area that really concerns me. But, it’s also where I think a lot of our arms control efforts can go towards which is increasing crisis communication channels. Like in the sixties and seventies, the US and the Soviet Union set up the hotline. We have nuclear risk reduction centres. China isn’t fully integrated into those. So, really getting China in particular more involved in those crisis communication channels. So, I think that that increased communication and understanding has to come hand-in-hand with the technological development and the changes in the pace of warfare.

**Moderator:** Do you worry that we are closer to nuclear weapons falling into third-party hands, that nuclear war is not going to be between great powers or secondary powers but actually is going to be caused or the next use is going to be by a third-party actor?

Heather: I don’t worry about that so much to be honest. I mean, I worry about it because it is a nightmare scenario to be clear but from my understanding of the improvements that have been made, particularly after 9/11 in nuclear safety and security, this was just such a massive effort in the 2000s and is something that the Bush Administration did lead on and did pretty well with, and they’ve got think tanks involved. So, to be honest, I don't know enough about the (inaudible 27.03) of these things to know how worried should we be.

But, there is an overarching aspect to this which is that countries, including Pakistan, including North Korea. Those nuclear weapons are really their most prized assets. I think they will go to great lengths and spend a very large amount of money to make sure that nobody else gets them especially because, if a third-party actor did get them and used them, that could be traced back to where it came from. That’s not going to look so good for Pakistan or North Korea. But then also, we get to this question about usability. I think one of the most important things that we as nuclear scholars, as security experts wherever we are, is to talk more about what actually happens in a nuclear explosion and to reinforce that nuclear taboo that-., Nina Tannenwald (ph 28.00) came up with this and talked about it. This was a big part of my nuclear education where I had worked in the defence sector in the US and I knew a lot about deterrents and then learning a lot more about what does a nuclear weapon actually do. It kills hundreds of thousands of people. It wipes out communities. Even just nuclear testing causes these huge changes to communities, to the environment.

And so, that, in my mind, is why they are special. They are different. That level of destructiveness. And that, those humanitarian consequences are something that do set them apart. And so, if we talk about are they usable or are they not, we have to always keep in mind those underlying consequences because I think that they make the case for why-, for deterrents, we might have to suggest that they are usable. But, really? Are they actually? I can't answer that because obviously it would be situation specific. But, just bringing it back to what you opened with and that Adenauer quote, I strongly disagree with this idea that a tactical nuclear weapon is basically artillery. There’s a lot of controversy about is any nuclear weapon tactical? Well, no. It's not because it would be a major game changer. It would be the nuclear use since 1945. It would completely change the geopolitical landscape in so many ways. So, I think that we just have to keep that barrier there and we do have to keep remembering that they are special, that they are different and why that is.

**Moderator:** (TC 00:30:00) How different is the Russian, the Chinese, the Pakistani, the Indian perception of nuclear weapons? Do you get exposure to how our competitors think about nuclear weapons?

Heather: I do a bit. Not as much on the Chinese side. There's obviously the security aspect which you've pointed to. That's clearly a major factor in both India and Pakistan's nuclear arsenals. And, just a brief aside, when we think about those lose it or use it scenarios and compressed decision-making times, so smaller
arsenals, South Asia, out of all the nuclear crises that I lose sleep over, is the one that would keep me awake at night just because there are these regional security concerns. But, the other aspect that I would add to the security motives for non-Western perceptions, there is a symbolic factor here as well and I think it's particularly important for Russia and the size of their arsenal that they still technically have numerical parity with the United States on their nuclear warheads, on capabilities-, actually, they have more warheads than the US does.

But, if you look to a lot of Putin's statements about how-, what was it that he said, that the class of the Soviet Union was the greatest tragedy in the twentieth century or something. Nuclear weapons are a daily reminder of Russian greatness, that Russia is still on par, in addition to being a member of the P5. I think that that symbolic status symbol aspect also comes into play for some of the other countries that we might be talking about here. And, I'm not suggesting-, as you say, I think it's important we don't romanticise this. When I say nuclear weapons are special, I don't mean that as in everybody should have them. Absolutely not. The NPT had the intention to stop that from happening. When we talk about the nine that do have them now, I think there is also this symbolic aspect to it which we do have to think about. And, the security and symbolic questions are particularly important if we want to talk about nuclear reductions and some day working towards a world without nuclear weapons because what is going to substitute for a nuclear weapon, not only in terms of its deterrent value but also in terms of that symbolic value.

Moderator: What a brilliant way to finish. Heather, thank you so much.