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TRANSCRIPT

Realities and Illusions of Canadian Foreign Policy

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PANEL ONE: Realities and Illusions of Canadian Security

Moderator:
Gordon Venner, former Associate Deputy Minister of National Defence

Panellists:
Thomas Juneau, Professor, International and Public Affairs, uOttawa
Stefanie Beck, former Deputy Minister of National Defence
Jonathan Berkshire Miller, Senior Fellow, MacDonald Laurier Institute

Gordon Venner:

First of all, what a great crowd. It's delightful to see so many faces and, in some cases, remember the names that go with them. I'm still working on a few. I'm not going to introduce the three panelists at length, given our time constraints and because they all have such long records of accomplishment that I might use up far too much of our time. I also suspect that all three are very well known to all of you.

I'll simply say that Thomas Juneau, Stefanie Beck, and Jonathan Berkshire Miller are three of the most experienced, informed, and insightful experts on Canadian security and foreign policy in Canada today. We are very fortunate to have all three of them here at the same time. We are also fortunate to have Kerry Buck, our former ambassador to NATO, serving as rapporteur for this session and the others later this afternoon. If you want to sneak anything into the minutes, you can accost her later.

I'm struck by how topical this session is. There are probably a lot of Globe and Mail readers in this room. I picked up the paper this morning and saw two stories on the front page. One reported that the Secretary of State for Crime was attributing recent shootings in Toronto to a foreign entity, which goes directly to the heart of Canadian security. The second suggested it may be impossible, because of workforce shortages, to build and maintain a new submarine maintenance facility in Atlantic Canada while also building new frigates.

There isn't a day that goes by now when you can't flip through the newspaper and run into issues related to Canadian security.

As Michael just reminded us, today's theme is the realities and illusions of Canadian foreign policy, which is an extremely broad topic. This panel is focused more specifically on the realities and illusions of Canadian security, but that still leaves us with a very large sandbox in which to play.

Canadian security encompasses a great deal. We could focus on economic security, military preparedness, domestic security, intelligence challenges, foreign interference, technological evolution, legal frameworks, cyber vulnerabilities, outer-space competition, and many other aspects of what is, frankly, a daunting and overloaded national security agenda.

I hope that over the next hour we'll be able to delve into some of those issues and others that may be raised from the floor. To begin, I'd like to give all three panelists free rein to choose the aspect of the Canadian security agenda where the contrast between current realities and illusions is most illustrative.

I'll start with Thomas, then move to Stefanie, and then to Jonathan. Thomas, you have the floor.

Thomas Juneau:

Thank you very much. I thought I would start at a fairly broad level. In later questions and perhaps during the Q&A, we can zoom in on more specific angles.

The general issue I want to focus on, in terms of realities and illusions, is multilateralism in the security realm, although some of what I'll say applies beyond security.

The point I want to make is that we increasingly see traditional forms of multilateralism being replaced by smaller, more ad hoc, and looser arrangements. We can use different names for them, but one useful term is *minilateralism*.

This is a trend we should expect to continue. We see it under President Trump, but it predates Trump. It was also a format of international cooperation favoured by President Biden. The trend has been developing for some time.

The question is: how does it work, what does it mean, and how can Canada leverage it?

The basic rule of minilateralism is that you have to pay to play. If you pay less, you play less. If you pay more, you play more and benefit more. It works like an investment.

Multilateralism has always functioned this way to some extent. What's changing is the investment-return ratio. In the past, a country like Canada could contribute relatively little and still participate in a wide range of multilateral settings. We could show up, be invited to different tables, and remain involved.

What is changing now is that if you don't contribute more, you may simply not be invited to play anymore, at least not to the same extent as before. The return ratio is changing.

This has two important implications for Canada: resources and priorities.

The first is obvious. You need something to contribute. You need currency to put on the table, whether diplomatic, military, or intelligence-related. If we stay in the security realm, intelligence diplomacy has always been transactional. I think it will become even more transactional in the future. If you want something in return, you need to give something.

Take the Five Eyes as an example. It's a classic form of minilateralism: ad hoc, informal, with no permanent secretariat. Canada contributes to the Five Eyes, but historically we've received much more than we've put in.

Current trends suggest that, in the future, whether within the Five Eyes or in other intelligence partnerships with the United States, that return ratio will decline. We'll continue to contribute, but we'll get less back than we have in the past.

The first implication, then, is resources. We need more resources if we want to continue benefiting from minilateralism.

The second implication is priorities.

There is a proliferation of minilateral forums. There is no realistic scenario in which Canada can participate meaningfully in all of them. In the past, we had a tradition of wanting to be involved in as many multilateral forums as possible, even when we had relatively little to contribute. We spread ourselves across many institutions.

That is becoming increasingly difficult. It raises the need to be much more selective and strategic about which forums we choose.

This means engaging in an exercise of priority-setting that we have often been able to avoid. That's not to say we never set priorities, but we did so far less than we will need to in the future. We could get away with being less focused. In this new environment, that approach will become much more costly.

I'll stop there in the interest of time.

Gordon Venner:

Thank you. Stefanie?

Stefanie Beck:

Oui, bonjour tout le monde. Ça fait plaisir d'être là et de voir tout le monde en personne. Ça fait longtemps pour certains d'entre vous.

And sorry for you guys on TV. We can't see you here, but I'm sure you all look great—certainly younger than all of us in the room.

Thank you for the invitation. It's a bit strange to be called an expert. I don't know about you, but I've never really felt like one, even after 36 years doing one job or another. I actually counted recently: I've had 22 different jobs. I'm really good about three inches deep on pretty much everything.

Moi, j'avais demandé de parler sur les préparations des militaires pour la défense du Canada.

I think it's important to start with a basic question: Why are we defending Canada? What exactly are we defending?

The answer changes depending on what's happening geopolitically, what's happening with climate, migration, water levels, and a host of other factors. It depends where you look.

In the last round of conversations within National Defence, our concern was increasingly about what you cannot see. We're already in a cyber war, as many of you know from your personal experiences or from the organizations you work with.

The military is responsible, in physical terms, for defending Canada from seabed to space. There, too, enormous changes are taking place because of new technologies. Staying ahead of what future warfare will look like is perhaps the most difficult challenge facing not only the Canadian Armed Forces but also Canada's defence industry.

The need to stay ahead of technological change is clear when you look at Ukraine. Nobody expected we would be fighting a ground war in the 2020s. In reality, it's not even much of a ground war anymore. It's a war fought just above the ground with drones, creating opportunities and challenges that would have been hard to imagine even five or ten years ago.

The nature of war is changing, and that means what we need to defend Canada is changing as well.

As I've said in other forums, procurement must change too. You're not buying a widget that will last ten years unchanged. You need systems that can evolve as technology evolves.

In the past, when funding was very limited and poor Gord was trying to run the organization, priority-setting was critical. You had to narrow things down to two or three major challenges and find solutions for those.

We're not in that space anymore.

Thanks, in part, to some of our neighbours and NATO allies stepping up to the plate—and reminding us that the geopolitical environment has changed—we now recognize that we need to invest. This year, Canada spent more than 2 percent of GDP on defence.

The challenge is spending that money in ways that Canadians can actually see and feel. That's much harder.

The first round of investments focused on the basics. If you don't have a strong foundation, the rest doesn't matter. That meant increasing the size of the military. We're on track to exceed recruiting targets for a second consecutive year.

Going forward, however, that means growing beyond the planned force of 82,000 to well over 100,000 personnel. If the Chief of the Defence Staff gets her way, there would also be a parallel civilian organization—well trained, though not military—that could assist in emergencies.

Here's where one of the illusions comes in. If the illusion is that National Defence alone is responsible for defending Canada, the reality is that everybody is responsible. It's not just a whole-of-government effort; it's a whole-of-society effort.

That reflects the nature of the challenges we face.

Part of the rationale for a civilian parallel force is to respond to emergencies, which increasingly means natural disasters. More trained personnel could assist during those events, allowing the Canadian Armed Forces to focus on actual military operations rather than sandbagging during floods. I think we'll see more of that in the future.

The investments being made now will result in a stronger military, one that's more ready to fight. Current readiness levels are roughly 50 percent across much of the force. About half of the aircraft can fly on a given day. About half of the ships can sail. A quarter of the submarines can do anything on some days. Forget the other three.

Beyond that, we're seeing a stronger Coast Guard, greater integration between the Coast Guard and National Defence—not militarizing it, but finding synergies—and more funding for CSE, CSIS, and the RCMP.

All of that reflects the broader nature of security and defence and the challenges Canada faces.

You can take the definition of security even further. Beyond economic prosperity, you could include food security. It's been interesting to see recent announcements from the Prime Minister's Office and Agriculture Canada in that area. I'll stop there.

Gordon Venner:

If only we had a former Deputy Minister of Agriculture.

Stefanie Beck:

Oh, I have views on that one too. Actually, it's money very well spent. We can have seed conversations later.

Gordon Venner:

Jonathan?

Jonathan Berkshire Miller:

Thank you, Gord, and thank you to the organizers. We only have a few minutes to talk about the illusions and realities of Canadian foreign policy, but it's a great topic for today.

I've been on the road a lot over the last six months, and I never thought I'd hear people talking about Davos in so many different capitals, from Ulaanbaatar to Jakarta. Don't worry, I'm not going to give a detailed interpretation of the Davos speech. Instead, I want to focus on the illusion of partnerships and what it actually means to be a partner.

Right now, with this surge to find partners, it's almost like being at a dance party where everyone wants every possible dance partner. I understand the tendency. It goes back, Thomas, to your point about multilateralism and wanting to be in every multilateral club. There is a similar push now toward diversification and building as many partnerships as possible.

The challenge—and the illusion—is the false separation between security and economics. When we talk about strategic partners, there is often an assumption that we can separate security and defence concerns from economic realities. That probably wasn't realistic 20 or 30 years ago, and it certainly isn't realistic today. Our adversaries don't see the world that way, and we need to be clear about that.

There is no neat way to divide things into separate boxes and say, "Here is our security relationship, and here is our economic relationship." We cannot deepen economic ties without those ties affecting the security dimension. When we define partnerships, we need to recognize that these areas are interconnected.

I'm also glad Thomas mentioned the idea of "pay to play" when discussing minilateral arrangements and partnerships outside traditional multilateral institutions. It's fine to think creatively about trilaterals, quadrilaterals, or other groupings, but you have to bring something of value to the table.

I'll give an example. When we were developing the Indo-Pacific Strategy, one area of interest was a Canadian Quad involving the United States, Japan, and South Korea. The conversation became more complicated when we asked a simple question: What exactly do we want to do together?

It's easy to assume that because we share broad values—rule of law, human rights, and so on—we naturally have a strong partnership. But partnerships require tangible contributions. That is the biggest challenge when moving beyond traditional alliances and exploring new minilateral arrangements, whether in Asia or elsewhere. Canada has to identify where it can genuinely add value.

If you could get in a DeLorean and go back in time, I would say that food security and energy security would have been strong areas of focus. Critical minerals are another example. These issues are very much in vogue today, but they were not necessarily central to those discussions at the time.

Think creatively about different forms of engagement but do so with a clear focus on where Canada can make a meaningful contribution.

My final point is that this interconnectedness applies not only to economics and security but increasingly to geography as well.

I was speaking earlier today with a German member of parliament who asked whether Canada was focused on Europe or Asia. I said both. The two are absolutely interconnected.

You can look at the battlefield in Ukraine and see how China is helping shape that conflict. Kaja Kallas has been quite open about that recently. But it works in the other direction too. Look at how Russia and China are cooperating in the Indo-Pacific, or how Russia continues to support the proliferation activities of North Korea.

We need to stop thinking in terms of separate geographic theatres that can be neatly divided and managed independently.

This is especially important for Canadians. The Arctic is part of this picture as well. Canada is a three-ocean nation, and hopefully we'll soon be getting those submarines. I think that decision is coming next week.

We have a vested interest in seeing the transatlantic, Arctic, and Indo-Pacific theatres as interconnected. I'll leave it there.

Gordon Venner:

You just gave me the perfect segue to the next question, so thank you.

I want to stay with our theme of illusions and realities. Stefanie, I'll ask you to start, then we'll go to Jonathan and come back to Thomas.

I'd like each of you to talk about the challenge posed by the different security threats Jonathan just described and the way they increasingly complicate one another across geographic boundaries, often in unexpected ways.

Jonathan touched on this already. Consider the war in Ukraine and the threats to Taiwan's autonomy. Supporting both places at the same time will inevitably strain the resources of many of their friends and allies.

We could come up with half a dozen similar examples very quickly. Think about efforts to prevent nuclear proliferation and how they become entangled with attempts to advance a Middle East peace process. One of the key countries in that peace process has never signed the Nuclear Non-Proliferation Treaty and possesses nuclear weapons. Another signed the treaty and is working toward acquiring nuclear weapons.

These intersections are everywhere.

That raises a larger question. Are we now living in a world where every significant security challenge is directly or indirectly connected to every other significant security challenge? Have we reached a point where progress on one issue depends on progress on all the others?

Are we living in a global village that has become so small that it's all or nothing? Stefanie.

Stefanie Beck:

You're certainly an uplifting person to have on a panel. But actually, I agree.

It didn't take long after the war in Ukraine began for people to start saying that China was part of the story. We can't talk about the war—or its eventual conclusion—without acknowledging China's role.

Even from a purely military perspective, Chinese planners are watching the conflict just as everyone else is. They're looking at drones and asking what can be done at long distances.

At the same time, the Taiwanese are drawing lessons too. You don't have to be a large country to defend yourself relatively cheaply. In Canada, we often talk about making yourself a porcupine—making yourself difficult and unattractive to invade. An adversary may be able to invade, but holding territory is another matter.

That has become one of the major lessons people around the world have taken from the conflict. It raises important questions about how we arm ourselves, how we rearm, what kind of ceasefire might be acceptable, and how Russia might use such a ceasefire.

It also raises questions about who is helping whom. Why are Iranian weapons ending up in Ukraine and being used by Russian forces? That's another example of how interconnected these conflicts have become.

Domestically, we've faced another challenge, and many European countries have faced it as well. If we're sending our best equipment and personnel abroad—in Canada's case, to Latvia, Germany, and elsewhere—then those resources are not available at home.

At what point do we decide that too much is deployed overseas and not enough remains here?

Canada has traditionally been an expeditionary military power. We have focused more on contributing abroad than on defending ourselves at home. I think that balance is changing.

That creates practical questions. If we're buying equipment for our troops in Latvia, are we buying the same equipment for forces stationed in Canada? Do we need to? The operational environments are very different.

Military personnel have said publicly that troops in Latvia are very well equipped, while those stationed in Canada often are not. Is that fair? How do you train on new equipment if it gets shipped overseas immediately and isn't available at home?

Those are real disparities.

When the latest war broke out in the Middle East, my first thought was that weapons would now be diverted to Israel rather than Ukraine. That immediately raises questions about priorities.

Which conflict is more important? Which one has greater consequences? Which one is more likely to end sooner?

Early in the Ukraine war, there was considerable discussion about whether a massive early effort by allies—providing huge quantities of weapons immediately—might have stopped the aggression before it became entrenched.

That didn't happen. Politically, it wasn't possible to generate that level of momentum.

Still, you can't help wondering whether it might have saved billions and billions of dollars in the long run.

That leads to another dilemma. Canada is now spending more than 2 percent of GDP on defence. Should we be spending even more? Or should those resources go toward food security, energy security, healthcare, or other priorities?

Those are major decisions, and they will remain major decisions every year going forward. Those submarines are not cheap.

Gordon Venner:

Thank you for that.

I take your point that technological change is connecting issues in ways we didn't previously anticipate, including by compressing distance.

About a year and a half ago, Jonathan and I were on a study tour in Taiwan. At one point, we were standing on a small Taiwanese island only a couple of kilometres off the Chinese mainland.

We could see the mainland clearly, and we could also see China extending a runway out into the ocean on reclaimed land. As the runway grew longer, the distance between that Taiwanese island and the mainland effectively became shorter.

Mark Norman, the former commander of the Royal Canadian Navy, was with us. He watched for a while and then said, "At this stage, an invasion isn't really a naval problem anymore. It's an engineering problem."

And if you can bridge that gap with short-range drones, it becomes even less of an issue.

Jonathan, over to you.

Jonathan Berkshire Miller:

Yeah, I think we're depressing our audience, but I'll continue to do so.

Let me zoom in on Taiwan for a moment. One of the risks—and perhaps another illusion—is underestimating contagion.

Think about Ukraine, Iran, and Taiwan, three issues that dominate the headlines. The conflict involving Iran is not just about Iran. As Thomas knows far better than I do, it has spread throughout the region. The conflict in Ukraine is not just about Ukraine and continues to expand beyond its borders. The potential conflict over Taiwan, and even the military exercises around Taiwan, are not just about Taiwan.

This is something I constantly remind people. Yonaguni Island in Japan and the Okinawan archipelago are only about 50 nautical miles from Taiwan. The Philippine archipelago sits nearby, in the heart of the South China Sea, deeply interconnected with Taiwan. When military strategists talk about the First Island Chain, they often flip the map upside down. They do that intentionally to demonstrate how difficult it would be to contain a crisis geographically.

We're all focused right now on the Strait of Hormuz and the economic implications of instability there. But the economic impact of a Taiwan Strait contingency could be five or six times greater for global supply chains. It would affect food security, energy security, and traditional security concerns.

Compared to a shutdown of the Taiwan Strait, what we've experienced recently would seem relatively minor. Once you understand the supply chains involved, you realize this isn't only about the Taiwan Strait. It's also about the Strait of Malacca and, eventually, connections extending toward the Strait of Hormuz. It's all part of one interconnected system.

My first point is that a serious crisis over Taiwan, particularly one involving direct military action by the United States, would be much bigger than Taiwan itself. Most of us understand that, but it's important to build that reality into our planning.

My second and final point concerns Canada. This is not the 2003 Iraq War. It's not like the current conflict involving Iran, where Canada might simply say, "We disagree with the premise, so we're opting out if the United States becomes involved militarily."

Whatever we think of it, the United States is our principal ally and our only neighbour, if you set aside Russia to the north. If the U.S. becomes involved in a peer-to-peer conflict with the world's second-largest economy, Canada does not get to opt out.

We know what that would mean. There would be sanctions, logistical demands, and countless other consequences—not to mention the more than 50,000 Canadian citizens living in the region.

It's a very big deal. And yes, I realize I'm making everyone even more depressed. But these are realities we need to be planning for and thinking about.

Gordon Venner:

Do you want to add something?

Thomas Juneau:

You framed your question around the idea that everything is connected to everything else.

For my Francophone friends in the room, some of you may remember Jean Dion from *Le Devoir*, my favourite journalist of all time. Jean Dion used to say, *Tout est dans tout,* which is probably one of the greatest philosophical observations in history.

More seriously, because this is a very serious issue, I think the challenge is that we often fail to understand the interconnectedness of the threats we face. We tend to silo our responses to threats that are, in reality, interconnected. Even when our response to a specific threat is appropriate in a narrow sense, the overall effectiveness is limited because we're not connecting the dots.

One way to think about this is through the lens of hybrid threats. "Hybrid threats" is a broad term that means different things to different people, but at its simplest, it refers to threats that operate below the threshold of open warfare.

Think about foreign interference, transnational repression, disinformation, and similar activities. When we analyze these threats, we tend to examine them separately. We may understand intellectually that they're part of a broader category called hybrid threats, but in practice we still treat them as distinct problems.

We do the same thing when we organize our responses. There is a transnational repression team. There is a disinformation team—or several disinformation teams spread across different departments. There is a counter-foreign-interference team, and so on. These groups know each other. They talk to one another. They sometimes cooperate. But they don't cooperate nearly as much as they should, given how interconnected the threats actually are.

If you look at these issues from the perspective of the adversary, it's often the same toolkit being used for different purposes. The same actors use similar methods to spread disinformation, interfere in elections, intimidate Iranian-Canadian or Chinese-Canadian activists, and pursue other objectives.

My answer, therefore, is yes. These threats are deeply interconnected. The problem is that our responses are still too siloed—both mentally and institutionally.

Gordon Venner:

Thanks. I sometimes think we live in a world where we assume we always have a choice. When different issues start overlapping and complicating our lives, we assume we'll be able to decide whether or not we want to get involved.

I was in Charlottetown two or three weeks ago when *HMCS Charlottetown* completed its transit of the Taiwan Strait. I remember thinking that if that had been the moment when everything suddenly escalated, Canada would have been involved. There would have been no way around it. The ship would have been right in the middle of the situation.

Sometimes we assume we have the luxury of choosing where and when we'll participate. Maybe we don't. That brings me to another question.

I referred earlier to the *Globe and Mail* front page this morning and the comments by the Secretary of State for Crime about the shootings in Toronto. That's a useful starting point because I want to focus on the relationship between domestic security issues and international security challenges.

Some examples are obvious. If you're dealing with foreign interference, the connection is straightforward. If you accuse a foreign government of ordering murders on your soil, you shouldn't be surprised when there is diplomatic blowback.

If you arrest a senior official from a powerful country while they're transiting through Canada, you can expect consular consequences.

If you designate part of a foreign government as an international terrorist organization and pass legislation that affects that state's diplomatic immunity, there will be repercussions.

If you impose financial sanctions with the legitimate goal of combating money laundering, but those sanctions also affect senior officials of foreign governments, you may find it much harder to engage with those governments afterward.

I could continue with other entirely hypothetical examples, but the broader point is obvious. Actions taken to address domestic security concerns often have international consequences. Acts of antisemitism or Islamophobia may be driven by domestic circumstances, but they can also be reactions to events taking place thousands of kilometres away. Similarly, highly divisive political issues in other countries are often played out within diaspora communities here in Canada.

The challenge is that the institutions responsible for responding to these issues are very different. On the domestic side, you may involve the RCMP, CSIS, FINTRAC, the Canada Border Services Agency, the Coast Guard, and others.

On the international side, you're dealing with people responsible for advancing Canadian values and protecting Canadian interests abroad. That means diplomats, trade commissioners, development officers, consular officials, and military personnel deployed around the world.

How do we do a better job of coordinating those efforts? How do we better integrate our responses to domestic and international challenges so that we can deal more effectively with these kinds of Canadian security concerns? Jonathan, perhaps I'll start with you.

Jonathan Berkshire Miller:

It's a great question. Going back to my earlier point about economics and security, you can't neatly separate them because states—especially adversarial states—will use whatever tools they have available to advance their national interests. The same is true when it comes to interference in domestic affairs.

We've seen this repeatedly. We've had two foreign interference inquiries. One thing I would say, Gord, is that we need to be more intellectually honest with ourselves about both the magnitude of the threat and the capacity of certain states to interfere in Canadian affairs at the expense of our domestic security.

You can read inquiry reports and see a long list of actors named. If you read closely, you can usually get a sense of who the most capable actors are. People who work in this field certainly understand which actors pose the most consequential threats to Canadian interests. But we're not always explicit about that. If we're not clear about the nature of the threat, it's difficult to develop an effective policy response.

I'll be less diplomatic about it. In my view, the People's Republic of China is the most significant actor when it comes to foreign interference and foreign influence activities in Canada.

That doesn't mean other actors don't matter. We can talk about Pakistan, India, and others. I'm not minimizing those challenges. But in terms of scale, sophistication, and capability, I think China is in a category of its own. We need to acknowledge that and have a serious conversation based on that reality.

As for the policy response, I completely agree with your point about coordination. There is growing awareness among the frontline agencies that they need more resources, whether that's linguistic capability, analytical capacity, or additional personnel.

Through the Indo-Pacific Strategy, for example, more capabilities are being directed toward the field, particularly in relation to China. All of that is positive. But I think we also need to rethink our partnerships.

The Five Eyes remains enormously valuable. It has achieved a great deal, though it also faces challenges. Fortunately, I'm not on the panel discussing those. We need to think beyond Five Eyes as well. If we're talking about the People's Republic of China, we should be asking who understands China best and who has the most experience dealing with the tactics used to interfere in domestic affairs.

That means looking not only to partners such as Japan and South Korea, but also, quietly, to Taiwan. I think we already do that to some extent, although there are obvious reasons why we don't always discuss it publicly.

There are multiple dimensions to this challenge. It's not only about how the Canadian bureaucracy coordinates internally. It's also about which external partners we choose to work with.

Gordon Venner:

Thomas, why don't we go to you next, and then we'll finish with Stefanie?

Thomas Juneau:

Sure. I'll be brief.

One way to think about this issue of coordination is through the role of the centre—something you know very well, given some of the positions you've held.

A recurring question is whether the Privy Council Office, or PCO, should play a stronger role in coordinating responses, not only on national security and foreign policy, but on issues that cut across all of those domains.

Going back to *tout est dans tout*, perhaps Jean Dion was right after all.

I realize there are a lot of people from Global Affairs in the room who may not be especially enthusiastic about the idea of a stronger PCO role. I don't want to generalize. But I do think it's a weakness in the system that PCO has only limited ability to push departments toward stronger coordination.

It's easy to say that. It's much harder to implement.

What would a stronger PCO actually mean? More personnel and resources? Probably.

Would it mean legislating the role of the National Security and Intelligence Advisor or the Foreign and Defence Policy Advisor? Those positions are not established through legislation, which is somewhat unusual given their seniority. There are limits to what can be done under our Westminster system. Deputy heads remain accountable to their own ministers and departments.

There was a mandate letter issued to the previous National Security and Intelligence Advisor, which I thought was a reasonable step in the right direction. It's not clear whether that precedent will continue.

The broader point is that we need a serious discussion about whether PCO is adequately equipped to perform the coordinating role you described.

I'll finish with a comment from someone I won't identify because it came from a Chatham House discussion. This person had worked both at PCO and in line departments. When asked whether PCO should be stronger, they said: "When I worked at PCO, I wanted PCO to be stronger. Now that I work in a line department, I want PCO to be weaker." It's a funny observation, but it captures the problem perfectly. Where you sit shapes how you see the issue.

Gordon Venner:

Stefanie?

Stefanie Beck:

Thanks. My concern was never that PCO was too strong. My concern was duplication. We don't want to have the same conversation over and over again in different places.

That's why the coordinating role of PCO is important. It serves as a convener and, when necessary, an arbitrator.

PCO doesn't control departmental budgets. It can't tell my minister—or any other minister—what to do. But it can interpret the Prime Minister's direction, and ultimately the Prime Minister tends to win those debates anyway.

I'll give a somewhat bureaucratic answer. I actually think it's an illusion that the Government of Canada is not joined up. Every year, we decide together on intelligence priorities. We decide together how we approach particular countries and issues. Heads of mission abroad set priorities collaboratively, including with other government departments. Those discussions influence performance assessments and feed back into headquarters.

During my time at National Defence, we put a major emphasis on strengthening the role of defence attachés, and that role will continue to evolve as new training and new deployments are introduced.

The major strategies we've been discussing—such as the Indo-Pacific Strategy—were built collaboratively from the beginning. We worked on that strategy for years, together. When departments help create a strategy from the ground up, they become invested in its success. Everyone has a stake in the outcome because if the strategy fails, every department involved shares responsibility.

The Defence Industrial Strategy is another good example. Multiple departments contributed to that effort. Initially, it wasn't intended as a funding exercise. It was supposed to be a framework strategy. Once funding became attached to it, however, interest increased dramatically—especially at a time when government-wide spending reductions were underway. That funding element also drove stronger governance, clearer accountability, and more specific objectives for each participating department. As a result, the final product became much stronger because of the collaborative approach.

The last thing I would say is that a great deal of coordination happens behind the scenes and simply isn't visible to the public.

In our former roles, all of us were having conversations with foreign governments every day. Those discussions often produced tangible outcomes, but they weren't necessarily public, and they weren't always things that the entire government needed to know about. Global Affairs, PCO, National Defence, and other departments work together constantly. Take countries such as Vietnam, for example. Or Taiwan. Or South Korea. You've seen us sign, or prepare to sign, information-sharing agreements. We're doing similar work with Germany and France.

Most Canadians don't pay attention to agreements like that. They hear about them and think, "What does that even mean?" But we know what they mean. They mean we can share more information, cooperate more effectively, and do more together.

Gordon Venner:

Tom, when you were talking about PCO, I was remembering that sense of whiplash that comes with moving in and out of the institution. On my first day there, Susan Cartwright, who was just leaving, turned to me and said, "Everybody should work in PCO - once." The perspective changes pretty quickly. Where you stand depends on where you sit.

Mr. Proudfoot hasn't jumped to his feet with a large hook yet, so I think we still have time to go to the floor for questions. Let's start with the lady standing at the back.

Jutta Wark:

Hi, good afternoon. My name is Jutta Wark. I thoroughly enjoyed the panel and thank you to all of you who are supposedly retired and should be putting your feet up, yet continue to come out and discuss these important issues. I'd like to shift the conversation slightly.

I recently retired from the public service as well. I spent the last ten years or so at Global Affairs Canada. Unlike many of my colleagues, however, I took a mid-career break to pursue a PhD at the University of Toronto, which, incidentally, was not particularly appreciated when I returned.

One issue I'd like to put on the horizon relates to the integration of domestic and foreign policy and the need for a whole-of-government approach. I spent many years working on Arctic issues, where that kind of coordination was essential and continues to be. We're now looking at policy horizons that extend much farther into the future than policymakers have had to consider for decades.

My question is whether Canada can do a better job of integrating the work of governments—at all levels—with the work being done in our universities. Compared with some other countries, I think Canada's universities remain somewhat disconnected from important policy conversations. Yet they are developing talent, training young people, and conducting research that could be highly relevant.

I'm originally from Germany, and I've seen how universities, think tanks, and governments interact there. It's not perfectly integrated, but there is an ongoing and productive conversation.

China also relies heavily on its academic community, whether on technology, policy, or strategic issues. I don't think we want to replicate the Chinese model, but there is probably something to be said for stronger connections among academia, government, and civil society.

An added benefit would be bringing younger people into these conversations and helping them understand the complex challenges governments face.

I'd be interested in hearing your perspectives.

Gordon Venner:

Thanks for that question.

I remember, in my early days in the Foreign Service, being struck by how difficult it could be to find academic experts when you needed them.

At one point, I had to consult the Jean Monnet Chair at the University of Montreal on issues relating to the European Union. I quickly realized that if I wanted any meaningful work done, I would need to find several thousand dollars to support it because the academic resources simply weren't structured to produce the kind of work government needed.

A few years ago, Rob McRae, another former Canadian ambassador to NATO, chaired an initiative at Carleton University that attempted to bridge the gap between academic expertise and government needs in the security and intelligence field. I attended one of the sessions. Rob went around the table asking representatives from various government departments what issues they most needed help studying. CSIS was there. CSE was there. National Defence was there. Global Affairs was there. As we went around the room, there were some department-specific concerns, but certain themes kept coming up. Cyberspace was one. Everyone was struggling with cyber-related challenges in their respective areas. Outer space was another, given the growing national security implications.

After hearing from the government representatives, Rob turned to the academics and asked what they were working on. The academics responded with topics such as Indigenous issues and national security, or gender studies and national security. By the time everyone had spoken, there was virtually no overlap between the two groups. The Venn diagram was empty. They were talking about completely different priorities. It's a longstanding challenge.

Fortunately, we have someone here who has experience on both sides of that divide. Thomas technically worked for me at one point before moving into academia.

Thomas Juneau:

In the narrowest possible technical sense, since I was on leave without pay.

I do have some views on this. I spent eleven years at National Defence and have now spent almost twelve years in academia. In my view, government-academia relations in Canada do not work particularly well. The example you just described illustrates the problem very clearly.

I think responsibility lies on both sides. From the academic side, much of what is produced is of limited practical use to government. That's simply the reality. Research can be highly theoretical, not especially relevant to policy, or focused on critical analysis rather than practical solutions. That work may have value, but often not from a policy perspective.

Part of the problem is incentives. Academia does not generally reward policy relevance. It is not deeply embedded in the culture. At the same time, blaming academics alone would be unfair.

On the government side—and I mean government broadly, not any particular administration—there is also a tendency toward insularity. There is not a strong tradition of regularly consulting external expertise. By external expertise, I mean academics, but also specialists from other sectors.

The next question is what can be done about it. In theory, there are solutions. In practice, everyone is busy, and creating meaningful engagement is difficult. More exchanges between government and academia could help. You mentioned one example already.

Government transparency would also help. If outside experts have a better understanding of what is happening inside government, they are more likely to produce work that is relevant and useful. If you cannot see inside the black box, it's very difficult to connect your work to what's happening there.

I could continue for quite a while, but my overall diagnosis is fairly critical.

Jonathan Berkshire Miller:

I agree with everything Thomas said. Let me offer a perspective from the think tank world.

I've had the opportunity to work with think tanks in several countries. Fortunately, none of them were in China, where think tanks are often deeply integrated into state intelligence and security structures. That's not a model we should emulate. There are, however, lessons we can learn from other countries. The United States has a unique and somewhat unusual think tank ecosystem. It's not necessarily a model that can be easily replicated. Japan and several European countries offer more useful examples.

I particularly liked Thomas's point about consulting outside expertise. One challenge I've observed is that consultation often becomes a box-ticking exercise. A government strategy is being developed, and someone says, "We should talk to academics." The consultation happens because it is expected, not because people genuinely see value in it. Neither side benefits much from that approach.

If you're assembling a policy dinner table, the real question is who should be invited. Academics should be there. But so should the private sector. Former officials should be there as well. In my view, former ambassadors and senior public servants are often underutilized. I remember looking at one advisory committee established around the Indo-Pacific Strategy. With apologies to anyone who served on it, there were very few former officials involved. I would have expected more former ambassadors and heads of mission to be part of that conversation.

We need a broader conception of expertise. Government often engages academia separately, the private sector separately, and think tanks separately. Sometimes there is even a reluctance to engage think tanks because they're seen as critics. Instead, we should bring all of those voices together and hope for the best.

Stefanie Beck:

What's funny is that's exactly what we do overseas. Those were the dinner parties we used to host. When officials from Ottawa travel abroad, we often arrange meetings with academics, think tanks, business leaders, and other experts because that's where the most interesting conversations happen. When I was in Berlin, for example, meeting with think tanks was simply part of the job.

Here at home, when governments conduct policy consultations—I'll use food security as an example—there is certainly engagement with academics, but there is often a stronger emphasis on practitioners. That may partly explain the disconnect. Government tends to ask: What can we do with this information? How is it operationally useful? It's not that academic work is unrealistic. It's simply that decision-makers are often looking for practical applications.

The final point I'd make is that research funding is often one of the easiest things for governments to cut. Many of us have had to make those decisions at one point or another. You may remember when Global Affairs still had a culture branch. Whenever budgets tightened, those kinds of programs were often among the first to disappear. Yet they remain critically important. So, keep fighting the good fight.

Jonathan Berkshire Miller:

One quick additional point. We should also be making better use of networks, particularly in the private sector.

I was just in Kazakhstan last week. The CEO of Cameco probably has stronger local connections than almost anyone in government. The same is true in countries such as India.

There are private-sector leaders with remarkable networks. There are academics and think tank experts with valuable networks as well.

The point isn't just to seek advice from these people. It's to think about how Canada can make better use of those relationships.

A true Team Canada approach would find ways to integrate into those networks rather than simply observing them from the outside.

Sabine Nölke:

Hi, Sabine Nölke, former ambassador and now, as my former boss used to say, an *éminence beige*. I have one comment and one question.

Regarding the discussion about academia and policy, I have two words for you: Wilton Park.

The British government effectively funds that institution. Whenever policymakers want to test ideas or discuss emerging issues, they organize a Wilton Park conference. People compete for the opportunity to participate and contribute. That seems like something Canada could support with a relatively modest investment.

My question relates to our theme of realities and illusions. What is the illusion regarding the United States as a stable defence and security partner? What is the reality? And how should Canada factor that reality into its decision-making?

Joanna Keating:

I'm Joanna Keating. You'll probably notice from my accent that I'm from Scotland. I recently arrived as the head of the Scottish Government Office in Canada, based at the British High Commission.

My question concerns the Arctic. Given recent developments involving Greenland and broader geopolitical shifts in the region, what do Canada's future Arctic alliances look like?

Thomas Juneau:

I'll take the question about the United States. We could easily spend the rest of the day discussing it, so I'll be brief.

There are many illusions in the current debate about the United States. The reality is that Canada has no choice but to manage this relationship.

There is no plausible future—one year from now, five years from now, twenty years from now—in which the United States is not by far Canada's most important partner in trade, defence, security, and intelligence.

We can diversify somewhat, and we should. We can reduce vulnerabilities and build resilience. We can become somewhat more sovereign or autonomous, whichever term you prefer. But the idea that Canada can fundamentally diversify away from the United States is an illusion. The reality is that we need to manage a relationship that will remain central to our national interests.

Jonathan Berkshire Miller:

I like the Wilton Park idea. As a proud Maritimer, I'd probably suggest Mahone Bay as the Canadian equivalent.

On the United States, I agree with Thomas. What we need to resist is fatalism. I think some recent speeches and debates have created a sense that there is only one inevitable trajectory for the U.S.-Canada relationship. We don't actually know that. There is enormous uncertainty, and there are probably fifty different plausible futures between today's reality and the worst-case scenarios people often imagine. We need to prepare for those possibilities.

One thing to remember is that every country has a different strategic relationship with the United States. It can be tempting to travel to Berlin, Helsinki, Seoul, or elsewhere and assume that all U.S. allies share the same experience. They don't.

Canada sits directly beside the United States. That creates strategic realities that are very different from those facing Germany or France. We can still exercise agency and pursue greater autonomy in some areas, but our strategic choices are not the same as theirs. That's simply the reality we have to work with.

Stefanie Beck:

I think the question about the United States ties directly into the Arctic discussion. I agree completely with Thomas and Jonathan.

The relationship with the United States is not going away. From a military perspective, the relationship remains strong. Working-level relationships remain strong. Intelligence cooperation continues to function effectively. There are many highly pragmatic professionals on both sides of the border.

The question isn't how we get through this period. The question is how we use current opportunities to emerge stronger on the other side.

From Canada's perspective, we're already seeing major investments in northern defence. That doesn't necessarily mean all of the spending occurs physically in the North. For example, Arctic over-the-horizon radar systems may support northern defence, but much of the manufacturing work will take place in Ontario.

There is a difference between policy objectives and program implementation. The goal is to strengthen Canada while demonstrating to the United States that we are a reliable and capable partner.

The same logic applies to energy security. Canada wants to be seen as a dependable source of clean energy and other strategic resources. At the same time, there is a balance to strike. You want to be an indispensable partner—not the fifty-first state.

As for Arctic alliances, the recent expansion of NATO is enormously significant. With the newest members, seven of the eight Arctic states are now NATO allies. That fundamentally changes discussions about Arctic capabilities, collective defence, and burden-sharing. I think we'll see significant progress in this area over the coming years. And every step Canada takes toward carrying a greater share of the burden strengthens our relationship with the United States.

Gordon Venner:

I think we have time for one final question.

Phil Pinnington:

We received several questions returning to the discussion about academia and government.

Phil Calvert asks about the China research unit that was established in the Asia Branch and brought academic experts into government discussions. Does that model have merit?

Anne Smiley notes that the Munk School produced the paper *Sovereign by Design: Strategic Options for Canadian AI Sovereignty*. It was reportedly circulated across multiple departments and well received. Since government may not always have the internal capacity to produce that kind of work, how can such collaboration become more common?

Tamia Spitka also commented that academic expertise remains underutilized.

I wanted to ensure those views were heard, even if we don't have time for a full discussion. Would anyone like to respond?

Gordon Venner:

I think we'll have to take those questions under advisement and perhaps use them to shape next year's discussion.

Let me close by thanking all three panelists for their excellent contributions. At the beginning of this session, I said we had a very large sandbox in which to play, and you've done an outstanding job illustrating just how broad and interconnected these issues are. We could easily spend an entire day discussing national security alone. But there are many other dimensions of foreign policy, and many other illusions and realities, that deserve exploration. With that, we'll hand things over to the next session. Thank you all very much.

PANEL TWO: Realities and Illusions of Canadian Prosperity

Moderator:
George Haynal, former Canadian Consul General, New York

Panellists**:**
Drew Fagan, Professor, Munk School, University of Toronto
Nathalie Dubé, former Director General, Global Affairs Canada
Patrick Leblond, Associate Professor, CIPS/uOttawa

George Haynal:

Très bien, on pourrait commencer avec notre deuxième panneau. Et cette fois, on va discuter les illusions et les réalités économiques auxquelles notre pays fait face. I'm going to follow Gordon's example and make a few introductory remarks, even though I hadn't planned to. Precedent is precedent. To me, there are three points worth making.

First, we've exchanged one illusion for another. We used to believe that our dependence on the United States guaranteed both prosperity and security. Now, many seem to believe that we must assert complete independence or we won't survive. These are two powerful narratives, and both need to be tested against reality. The first already has been.

The second illusion is that, at least in public discourse, we've often looked down on rocks, logs, oil, and wheat. Yet those remain our strengths. In fact, they're among the few areas where we possess significant advantages and opportunities to build. Perhaps that reality is finally being recognized by the current government.

The third point relates to the discussion from the previous panel. I had the opportunity to work both inside and outside government, including at PCO, and I learned that excessive isolation within the public service is dangerous.

We sometimes fall into the belief that making policy is enough—that we know what policy should accomplish and everyone else simply needs to implement it. In reality, there's often a significant gap between policymakers and people working in the real economy.

With those observations, let me introduce our panel. We are very fortunate to have three speakers who are deeply involved in international economic issues and who bring a wealth of experience.

Drew Fagan probably needs little introduction to anyone who followed *The Globe and Mail* over the years. Since then, he has played central roles in major issues at both the federal and provincial levels.

Nathalie Dubé is a seasoned diplomat and one of Canada's most thoughtful economic policy practitioners.

And Patrick Leblond is one of Canada's leading academic experts on international trade.

I think we'll have a discussion that is every bit as interesting as the first panel. Economic and security issues are clearly interconnected and inseparable, and this conversation will naturally build on the themes we've already explored.

With that, Drew.

Drew Fagan:

Thanks, George. I have to start by saying that I just turned to Nathalie and said, "George is stealing our material."

Before I get into the economic discussion, I want to touch on something from the end of the previous panel: the relationship between government, academia, and the private sector.

I joined DFAIT mid-career and later became a deputy minister at Queen's Park. Recently, someone called me because they were thinking about bringing more people from outside government into senior public service positions. They asked about my experience. I sent them a report by Arthur Kroeger on the success rate of mid-career entrants into the public service. I was shown that report about six months after arriving at DFAIT. It concluded that most people fail. That was not particularly reassuring at the time. These are highly capable people, but government is a strong and complex culture. The federal public service is concentrated in Ottawa, and there are real barriers to entry. I managed the transition reasonably well, but the challenges are real.

The second point concerns academia. At the Munk School, I'm the only professor with that title who isn't a career academic. We have many sessional instructors and practitioners. Former public servants teach. Former deputy ministers teach. Rob Fonberg taught for several years. Others have as well.

Last year I spent time at Yale's Jackson School. Their model is interesting because about half of their instructors come directly from Washington. Their students are preparing for careers in public policy, global affairs, consulting, business, think tanks, and politics. That balance matters.

It's important to have career academics teaching subjects I don't fully understand, like advanced quantitative methods. But it's equally important to have practitioners who can connect theory to the real world.

Let me connect this to the broader discussion. Jonathan spoke about interconnectedness. Thomas spoke about the United States. My own view echoes some of what they said.

Geography still matters.

I've been following the CUSMA negotiations fairly closely. There's a sense that Canada is playing defence right now, but also that our continental relationship remains fundamental. You can see this in the Prime Minister's messaging. People focus on the Davos speech, but his speech in New York was equally important. The New York speech emphasized continued integration with the United States. The Davos speech focused more on diversifying and reducing dependence. Those are not contradictory messages.

Let me offer a few rough numbers. Canada's economy is about $2.1 to $2.2 trillion. Roughly three-eighths of that is tied directly to trade with the United States. About one-eighth is tied to trade with the rest of the world. The remaining half is domestic economic activity. Those are approximate figures, but the basic point stands.

We are not going to move away from the United States.

And despite what some people suggest, that's not the government's intention either. If you read the Prime Minister's New York speech carefully, that becomes very clear. The goal is not to pivot away from the United States. It's to defend our interests while expanding opportunities elsewhere. We may end up with a new arrangement that includes less integration in some sectors and more integration in others.

If there is one area where integration may deepen, it's critical minerals—and possibly energy. In fact, critical minerals may play a role in the next phase of the relationship similar to the role energy played in the original free trade agreement of the 1980s.

This isn't a pivot away from the United States. It's a restructuring of the relationship.

The other illusion I'd mention concerns the idea of a sudden rupture. There's been a lot of discussion about a dramatic break with the United States. Certainly, many people feel that way. I spent the last year in the United States, in a blue state. People often asked what it was like. My answer was simple: I read the same news you do.

But if you look at the data, the shift didn't begin in 2025. If there was a rupture, statistically speaking, it happened around 2001. Back then, 88 percent of Canada's trade was with the United States. Today it's closer to 72 or 75 percent. More importantly, the U.S. relationship represented more than half of Canada's GDP at its peak. Today it's considerably less.

Whether that's good or bad depends on your perspective. The reality is that geography still matters. The illusion is that we're somehow moving away from the United States.

In reality, we're playing defence in North America while simultaneously pursuing opportunities elsewhere—in Europe, Asia, and beyond. And as Jonathan noted earlier, this is not an either-or choice.

Nathalie Dubé:

I'll speak from what used to be my parish: Europe.

As Drew and I were discussing earlier, Europe cannot replace the United States as Canada's primary market. Geography and economic gravity simply make that impossible. What Europe can be is a strategic complement. It can help diversify our markets, attract investment, strengthen supply chains, and give Canada more room to manoeuvre in its relationship with the United States. L'opportunité européenne est bien réelle, mais seulement si nous allons au-delà de nos illusions réconfortantes et agissons en fonction des réalités pratiques que nous offre l'Europe.

The first illusion is that Europe can replace the United States. It cannot. Our supply chains are too deeply integrated. The auto sector is a perfect example. You cannot unpick that supply chain.

The same applies to energy. In 2024, Canada supplied 70 percent of U.S. hydrocarbon imports and 81 percent of imported electricity. Those are enormous numbers. Mr. Trump can say all he wants in terms of “we don't need anything from Canada.” But if tomorrow morning all of that stopped, a lot of the industrial base of the U.S., particularly in the Northeast, but across the board, would suffer greatly.

C'est important, je pense, de penser que la diversification, ce n'est pas un abandon des États-Unis, c'est une police d'assurance. C'est un levier de négociation et c'est aussi une source de résilience pour notre pays.

Europe is our second-largest trading partner and collectively one of the world's largest economies. A stronger relationship with Europe—and with partners in Asia and Latin America—can reduce the risks that come from excessive dependence on a single market.

The second illusion is that CETA alone can deliver the European opportunity.

Trade agreements create openings. They do not create outcomes. Canadian businesses still need market intelligence, financing, distribution partners, regulatory expertise, management commitment, and patient capital. Selling into Europe is fundamentally different from selling into the United States. A Canadian SME can often drive products across the border. Europe requires more preparation, more investment, more adaptation, and more time. Products may need different certifications, different labels, and different compliance processes. L'Europe, ce n'est pas non plus un marché unique. Elle constitue un ensemble complexe de marchés nationaux, régionaux, linguistiques et réglementaires. Ce n'est pas aussi simple que l'on pense.

The third illusion is that shared values automatically create shared prosperity. They don't.

Europe and Canada share democratic values, support for the rule of law, climate objectives, labour standards, and open markets. That doesn't eliminate commercial friction. Les systèmes réglementaires européens peuvent être très exigeants. Les processus pour les marchés publics sont aussi très complexes. Les politiques industrielles deviennent plus stratégiques. Les instincts protectionnistes sont plus forts. Sans oublier que les entreprises européennes sont aussi très compétitives. We're not going in there by ourselves. That market's been integrated for decades, and the relationships that exist there exist for a reason. They've been really profitable for everybody involved.

The opportunity isn't sentimental. It's strategic. Shared values make cooperation easier, but durable prosperity comes from integrated networks, investment, and competition.

Now for the realities.

L'Europe, et plus précisément l'Union européenne, est l'une des plus grandes économies du monde. Le deuxième partenaire commercial du Canada après les États-Unis, le Royaume-Uni, l'Allemagne, le Pays-Bas, la France, l'Italie sont tous dans notre top ten déjà. Alors on ne va pas réinventer la roue ce côté-là, mais il faut juste aller plus profondément.

In 2025, the good news is that exports to Europe and Central Asia rose sharply, increasing by $22 billion or 30%. That followed a 24% increase in 2024. That’s nothing to sneeze at and something that we can build upon. Since the provisional application [of CETA] in 2017, trade has really multiplied with the EU. We need to go and do more of that.

Investment ties are also deep. Direct investment stock from Europe went up by $32 billion to $529 billion at the end of 2025. That represents 33% of all investment stock in Canada. That's enormous. To compare, the US is 46%. So, Europe plays a really large role in our FDI stock in Canada.

Le Canada a aussi conclu, et ça c'est une des, une de mes, des trucs que je faisais lors de mon dernier travail comme direction, directeur général sur l'innovation. On a conclu de nombreux accords sciences, technologie, innovation avec tous les grands pays européens chefs de file en termes d'innovation et aussi avec l'Union européenne elle-même. Donc il y a beaucoup d'opportunités là qui se présentent pour aller plus profondément sur une intégration en sciences technologies pour justement découvrir les services et les biens de demain pour pouvoir les fabriquer ensemble. The new EU Canada strategic partnership for the future announced in June last year will, to quote the PM's press release will “build on our enduring commitment and further reinforce the strategic partnership between the European Union and Canada”.

The final reality is that Europe genuinely wants what Canada has to offer. Europe needs secure sources of critical minerals, energy, food, clean technology, digital infrastructure, and defence inputs. Canada is well positioned in all of those areas.

But we shouldn't simply export commodities. We should build value chains. That means processing, manufacturing, common standards, joint innovation, and attracting investment. It also means Canada must improve its own project approval processes if we want to attract more European capital.

In conclusion, Canadian prosperity requires optionality, more customers, more investors, more supply routes, more value chains, more standards partnerships, more joint innovations, and more strategic allies. Canada can provide all of that and help us be in a stronger position in North America by reducing our vulnerability created by excessive dependence.

Il n'en tient qu'à nous pour faire les efforts nécessaires pour faire de ceci une réalité. Le gouvernement peut offrir des outils aux entreprises, mais encore une fois, les entreprises devront prendre les décisions qui s'imposent et aussi faire les efforts nécessaires.

Et ça m'amène à parler à Patrick.

Patrick Leblond:

Bonjour. Good afternoon.

I'd like to thank Jonathan Berkshire Miller for emphasizing that economics and security cannot be separated. Too many people still treat them as separate issues, especially in academia.

En fait, j'allais parler d'une réalité, d'une illusion, et en écoutant mes collègues ici sur le panel, j'ai décidé de les inverser. Donc en fait, l'illusion, si on part d'un point de vue purement économique, et c'est là où on voit le lien entre sécurité et économie. Si on part d'un point de vue purement économique, la diversification dont on parle est une illusion.

Trade diversification has been discussed in Canada for decades. Everyone in this room has probably heard the same conversation repeatedly throughout their careers.

From a strictly economic perspective, the reality is much more uncomfortable. If our only goal were maximizing economic prosperity, Canada should become the fifty-first state. We would have lower taxes, access to a larger economy, and no tariff uncertainty. From a purely economic standpoint, Donald Trump would be right.

But that's not how we think about prosperity.

We care about sovereignty. We care about security. We care about democracy. We care about maintaining Canada as an independent country. Those considerations change everything. That's why we pursue diversification. We believe in Canada being its own country for the last 250 years. For those who have not read Madeleine Drouin's book about *He Did Not Conquer* about Benjamin Franklin, please go and read it. If it was not for what happened then in Canada, in Quebec, we would not be here.

The challenge is that many people assume diversification will happen automatically. Our prime minister is going to have this great investment fest in September. And all of a sudden, there's going to be half a trillion dollars just falling from the sky to fund all these great projects that we are putting forward. There's an expectation that governments will announce initiatives, investors will show up, and money will simply appear.

That's not how business works. Businesses follow the path of least resistance. They go where risks are lowest and returns are highest.

If Canada wants greater economic independence while preserving broader notions of prosperity—good healthcare, strong education, democracy, openness, diversity—then we will need to invest heavily. And much of that investment will have to come from the public sector. Governments will need to reduce risks and create incentives.

Take pipelines. There is a reason private companies have been reluctant to build major new pipelines. It's not because they're waiting for government handouts. It's because the economics and risks are uncertain.

Donc il va falloir être prêt à payer. Ça veut dire pour les entreprises, les PME, ce n'est pas juste de signer des accords de libre-échange qui ouvrent la porte, c'est de les accompagner main dans la main. Pour des années, si on veut qu'elle puisse développer les marchés européens, japonais, coréens, thaïlandais, indiens, si vous voulez.

At the end of the day, geography still exerts a powerful pull. Drew talked about gravity. If we want to partially escape the gravitational pull of the United States, we need enormous amounts of fuel. Human capital. Financial capital. Political capital. As a society, we need to decide whether we're willing to make those investments.

The goal isn't to drift away from the United States entirely. It's to achieve a more balanced orbit—one in which we retain greater freedom of movement and greater strategic autonomy. And for the record, I'd prefer that those rockets not come from Elon Musk. Thank you.

George Haynal:

A good start. Three quite different perspectives. Let me ask a few questions to get the discussion moving. Drew, I'll start with you.

This takes us back to the famous Third Option from more than fifty years ago. Interestingly, although many people associate it with *Foreign Policy for Canadians*, it was never actually adopted as policy. It was more of an idea than a formal government strategy. Another myth, perhaps.

Since then, Canada has experimented with several approaches. At times, we've simply allowed integration with the United States to proceed without a formal framework. At other times, we've negotiated treaty arrangements in the hope of securing access to the American market. We've also pursued diversification through free trade agreements with many countries, yet our exposure to the ups and downs of U.S. politics remains largely unchanged. So, what comes next?

How would you envision a Fourth Option—one that combines an optimal level of integration with the United States, more independence, and a broader network of global relationships? Could this Fourth Option amount to a new form of sovereignty?

Drew Fagan:

I want to start with Patrick's point. Fundamentally, the Fourth Option is recognizing that we don't really have discrete options. We're not making a single choice. We're trying to do everything at once. We're trying to balance domestic expansion, including infrastructure development, broader global engagement, and managing our relationship with the United States.

Take the Gordie Howe Bridge. We managed the financing and construction side remarkably well. We just haven't managed to open it yet.

The notion that Canada ever had true free trade with the United States is also somewhat misleading.

We never had a European-style integrated market. Even after free trade agreements, regulatory differences remained significant barriers. If we truly had seamless free trade, our economic integration with the United States would be much deeper than it is today.

Paul Krugman once observed that Canadians live closer to Americans than they do to one another. Most major Canadian cities are closer to major American cities than they are to other major Canadian cities, with a few exceptions such as Calgary and Edmonton. That geography still matters.

On Patrick's fifty-first state thought experiment, I'd point out that Trump isn't actually offering us equal status. The dysfunction of the American political system can be illustrated by the fact that the twenty-one smallest states have forty-two Senate seats. Collectively, they have roughly the same population as California—and roughly the same population as Canada.

If Canada were to make a counter offer, perhaps we'd ask for twenty-one Senate-equivalent states. If Trump were serious, maybe we'd negotiate down to fifteen. The point is that representation and political power are deeply distorted.

Back in 1970, when discussions about diversification were taking place, none of the six chapters of the report focused on the United States. At the time, politics still dominated economics.

Then came the shift toward market liberalization in the late 1970s and 1980s—Thatcher, Reagan, Mulroney, freer trade, lower taxes, and more open markets.

Now we're moving into another era.

As Jonathan noted earlier, everything is connected. Security is connected to trade, and trade is connected to security.

The Fourth Option is not about choosing between the United States and the rest of the world. It's about playing defence with the United States while expanding opportunities elsewhere.

I actually think the current negotiating team is handling a difficult situation reasonably well. There will be deeper integration in some sectors and less integration in others. Critical minerals may see deeper integration. Autos may see less. And frankly, if we have to choose, I'd focus on critical minerals.

Critical minerals are today's equivalent of the old staples economy. Autos are increasingly a declining sector in North America. That's not something I'd say publicly to Doug Ford, but I believe it's true.

At the same time, we're finding opportunities in Europe, Asia, and elsewhere. So, this isn't a choice. It's a balancing act.

George Haynal:

Nathalie, you spoke eloquently about Europe. My question is how much deeper that relationship can realistically become. Given the erosion of confidence in Atlanticism, and Canada's current focus on managing its relationship with the United States, is there really room for a significantly deeper partnership with Europe?

And more broadly, are there governments interested in developing economic partnerships with Canada as a way of resisting what increasingly looks like a U.S. preference for a Fortress North America model?

What can Canada offer that would make us indispensable to foreign partners despite America's desire to keep us firmly within its orbit?

Nathalie Dubé:

Thanks, George. I touched on some of this earlier but let me expand.

I do think it's important to deepen our relationship with Europe—not just in terms of trade, but in terms of working together. Europe increasingly sees Canada as a trusted transatlantic partner. Whether we're talking about Coast Guard ships being built in Finland, access to critical minerals, or broader industrial cooperation, there are many areas where we can work jointly. Those kinds of partnerships help create resilient alliances that can protect both Europe and Canada from overdependence on any single actor.

They also help provide balance in relation to China's growing influence. Countries such as the United Kingdom, France, Italy, and Germany are natural partners. Germany, in particular, is a highly advanced industrial economy that needs secure access to critical minerals. That creates opportunities for mutually beneficial partnerships. We've already deepened cooperation with Germany and the UK on critical minerals.

The next step is to move beyond extraction and into processing and manufacturing. At present, we're overly dependent on China for critical minerals processing. China possesses much of the expertise and infrastructure required. Working with technologically advanced partners such as Germany, France, the UK, and the broader European Union gives us a chance to change that.

The goal should be not only to extract critical minerals in Canada but also to process them here and become a reliable supplier to global markets.

We're already expanding science, technology, and innovation cooperation. One of the last agreements I signed as a director general was with the Netherlands to deepen collaboration in these areas.

Another important opportunity relates to scientific talent. The United States has reduced funding for universities, research institutions, and scientific programs over the past several years. Canada now has access to major European research initiatives, including Horizon Europe.

We should be more proactive about attracting researchers from the United States—whether they are Americans or international scientists working there—who may be looking for funding, stability, and freedom to pursue their research. That represents a real opportunity for Canada. I'll leave it there.

George Haynal:

Patrick, you made the point that Canadian businesses have built their strategies around proximity to the United States despite decades of trade agreements elsewhere. Businesses respond to opportunities and threats.

So where do you see the opportunities outside the United States that could actually support the Prime Minister's diversification agenda? And are current U.S. trade policies creating enough uncertainty to encourage Canadian businesses to look elsewhere?

Let me end with a more pessimistic question. Is it possible that geography still wins? Will businesses decide it's easier to absorb tariffs and regulatory uncertainty—or even relocate operations to the United States—rather than fundamentally change their business models? How do we keep Canadian businesses rooted here while encouraging them to compete globally?

Patrick Leblond:

I was tempted to answer all of your questions with "yes." Before I do, let me clarify something. If anyone thought I was seriously advocating for Canada becoming the fifty-first state, I wasn't. My point was simply that if we don't want that outcome, we need to be prepared to invest significant effort into reducing our dependence.

As for diversification, I don't think the choice is really about specific sectors. If Canadian companies are competitive in Europe or the Indo-Pacific, they're probably competitive in the United States as well. And if it makes sense for a Canadian company to do business in the United States, we shouldn't stop it.

The challenge is how we encourage businesses to expand beyond the U.S. market. We also need to think about attracting investment into Canada for Canada—not just as a gateway to the United States.

For years, Canada's pitch was simple: invest here and gain access to North America. That argument still matters, but it's no longer enough.

Many companies will happily pay a 10 or 15 percent tariff if that's still cheaper than breaking into markets such as Japan, Germany, France, or South Korea. Others will simply establish operations in the United States and serve that market directly.

The real question is how we make Canada attractive as a place to invest, innovate, and export from. This is where I think the current government's messaging is sometimes mixed.

Mark Carney occasionally governs this issue like a central banker. The idea seems to be that if the government sends enough positive signals, markets will respond on their own. It's reminiscent of Mario Draghi during the euro crisis. Draghi famously said the European Central Bank would do "whatever it takes." Markets believed him, confidence returned, and the program largely succeeded without being fully deployed.

I think Carney hopes something similar will happen here. The government sends the right signals, investors gain confidence, and capital flows in. I hope that works. But I'd also like to see a Plan B. Because if confidence alone isn't enough, we may need stronger interventions and more direct investment. I'll leave it there.

Drew Fagan:

A couple of additional thoughts. Current global conditions do suggest that the world needs at least some of what Canada has. Remember when the German chancellor came to Ottawa in 2022 seeking LNG and critical minerals? At the time, Canada effectively turned him away. That has changed.

Today there is much greater recognition of Canada's role in supplying energy, minerals, and strategic resources. The other major change involves the United States.

When free trade was negotiated in the 1980s, nobody seriously imagined that economic dependence could be weaponized. We worried about dependence, certainly, but we assumed it would operate within a framework governed by rules.

Donald Trump changed that. He has weaponized economic integration.

Take autos. For decades, automobiles were viewed as the quintessential integrated North American industry. Today they're treated as a political weapon.

The same is true of sectors such as supply management. Whatever one's views on supply management, Trump focuses heavily on sectors that are actually declining. Coal is another example.

The point is that he has politicized relationships that previous administrations largely treated as economic questions. Back in the 1980s, Chapter 19 dispute settlement was controversial in the United States because it represented a significant concession to rules-based trade.

Today, those protections look much weaker because they can simply be overridden politically. That's a reality Canada has to confront.

George Haynal:

Let's go to questions.

Audience Member:

Thank you to the panelists for an insightful discussion. I especially appreciated the references to space. I'm a recent graduate of the University of Ottawa Faculty of Law. Before that, in a previous life, I worked as a trade commissioner in Tanzania. One thing I've noticed is that we've discussed Europe, Asia, and North America, but nobody has mentioned Africa. Canada recently released its first-ever Africa Strategy, which includes economic cooperation, security cooperation, climate initiatives, and development. Is that strategy itself an illusion? And what role does Africa play in Canada's future prosperity?

Nathalie Dubé:

I'll take that question. No, I don't think the Africa Strategy is an illusion. I do think Africa is the continent of the future. Just look at the demographics. That doesn't mean engagement will be easy.

My own experience comes primarily from Morocco and Mauritania. There is already meaningful trade between Canada and Morocco. For example, much of the couscous produced in Morocco is made using Canadian durum wheat. During my posting, I spent three years trying to negotiate a free trade agreement with Morocco. Unfortunately, we didn't succeed.

There is definitely room for deeper engagement. The key is to think strategically and regionally. Africa is enormous. Canada needs to prioritize where it can build meaningful partnerships.

Investment protection is especially important. Canadian mining companies, for example, have occasionally faced nationalization or other disruptions. Strong foreign investment protection agreements are critical. Trade often follows investment. If we can create secure investment frameworks, there's real potential for growth. But this is a long-term project, not something that will deliver results overnight.

George Haynal:

I suspect those observations apply to many regions beyond Africa as well.

Audience Member:

Bon, elle m'a volé un peu ma question parce que c'était aussi sur l'Afrique. J'étais au Congo tout récemment. Vous avez parlé tout à l'heure d'ailleurs de la question des minéraux critiques, et puis que c'était la Chine où il y avait la plus grande capacité de traitement. Mais s'ils ont la plus grande capacité de traitement, c'est parce qu'ils ont justement accès à ces ressources-là. Et si on n'agit pas maintenant, je pense qu'on perd aussi une opportunité. Ça fait quoi, depuis une heure et demie, depuis une heure qu'on parle, c'est la première fois qu'on parle d'Afrique. C'est important de s'ouvrir. On avait une stratégie des Amériques aussi il n’y a pas si longtemps que ça, pour ceux qui s'en souviennent. J'aimerais aussi vous entendre parler des Amériques et voir comment tout ça, ça se positionne?

George Haynal:

We could easily spend an entire day discussing regional opportunities. Unfortunately, we only have a couple of minutes left, so we'll have to leave that for another occasion.

Daryl Copeland:

My name is Daryl Copeland. Security and prosperity are ultimately the goals of international policy. To achieve those goals, governments rely on diplomacy, defence, and development.

What concerns me is that we're dramatically increasing defence spending while reducing investment in diplomacy and development. That imbalance makes it much harder to achieve the Prime Minister's broader objectives. You can't solve climate change with an airstrike. You can't deploy an expeditionary force to create alternatives to a carbon-based economy. Do we actually have the policy tools and resources required to achieve the outcomes we're talking about?

Audience Member:

There's another issue that hasn't really been discussed. We're living through a shift from an Anglosphere-centred world toward a more Sinosphere-centred world. By almost any measurable indicator, that's happening. Are we prepared for it?

George Haynal:

That could easily be the topic of another full-day conference. Michael has the final question and, as president, he gets the privilege.

Michael Small:

A simple question for each of the panelists. Are you optimistic or pessimistic about Canada's ability to play defence at home, to use Drew's phrase, while also playing offence abroad over the next five years?

Patrick Leblond:

Yes, I'm optimistic. We don't really have a choice. Otherwise, we're back to the fifty-first-state scenario. We need to remain optimistic, but we also need to take the actions required to justify that optimism.

As for Africa, Latin America, diplomacy, and defence, my answer is yes to all of it. We're no longer living in a world where we can choose one priority over another.

We need to do everything. We need a whole-of-society approach.

The United States isn't going to change anytime soon. China isn't going to change anytime soon. Russia isn't going to change anytime soon.

Canada remains one of the ten or eleven largest economies in the world. That matters. We're not large enough to navigate these challenges alone, but we're large enough to make a meaningful contribution alongside partners who share our values and interests. I genuinely believe we can succeed.

But it will require investment. Human capital. Physical capital. Financial capital. And governments will have to explain clearly to Canadians why those investments matter. If we want the country that we say we want, we need to be prepared to pay for it.

George Haynal:

I would describe that as pessimistically optimistic.

Nathalie Dubé:

I'm optimistic. I've seen what Canadians can accomplish when we work together to meet challenges. That's my answer.

Drew Fagan:

This situation—if we want to call it a crisis—has been unfolding for about eighteen months. Oddly enough, I'm becoming more optimistic.

At the same time, some of the rhetoric makes it sound as though we're living through the Battle of Britain. We're not.

But I'm also not convinced that Canada has fully adapted to the challenge yet. There's still a lot of old politics, old rivalries, and old habits. So, I'm hopeful, but cautiously so.

George Haynal:

Maybe more 51st state stuff from President Trump will help. We do owe President Trump a whole new sense of national identity, by the way. This conversation makes me more positive in terms of a country that sticks together and works together

Thank you very much.

PANEL THREE: Canadian Foreign Policy in an Era of Revolutionary Technologies

Moderator:
Jennifer Irish, Principal, Pendulum Geopolitical Advisory

Panellists:
Ann Fitz-Gerald, Director, Balsillie School of International Affairs
Rafal Rohozinski, CEO, SecDev
Vass Bednar, Managing Director, Canadian Shield Institute

Jennifer Irish:

If I could ask everyone to settle in and take their seats, we'll transition to our next discussion. Let's get digital.

We've heard throughout the day that we're living through a turning point in history—an inflection point, perhaps a world between orders. So where do revolutionary technologies fit into that story?

We're living in a digital age. Technology is both an enabler and a disruptor. Increasingly, it is one of the defining forces shaping geopolitical competition and the exercise of power.

Whether we're talking about artificial intelligence, cyber capabilities, quantum technologies, or cryptocurrencies, these technologies are reshaping the levers of power in the international system. States are increasingly using them to pursue their objectives.

Stefanie Beck spoke earlier about the future of war. The future of war is already here. For Canada, the most likely scenario for the foreseeable future is a persistent state of hybrid warfare—competition and conflict below the threshold of open war. We're no longer talking about just three domains: land, sea, and air. Cyber and space have become integral domains as well.

We've already heard that national security and economic security are intertwined. We can add foreign policy, technology, critical infrastructure, supply chains, and—an issue particularly close to my heart—information integrity. These are no longer issues adjacent to foreign and defence policy. They are central to it.

So, what does all of this mean for Canadian foreign policy? How should Canada position itself?

And how do we cover all of that in the skimpy hour Michael Small gave us for the panel dealing with perhaps the most complex issues of the day? The answer is simple: you invite brainiacs.

We're fortunate to have three exceptional panelists: Dr. Ann Fitz-Gerald, Director of the Balsillie School of International Affairs; Rafal Rohozinski, CEO of the SecDev Group; and Vass Bednar, Managing Director of the Canadian Shield Institute.

We'll begin with a structured discussion around a few key themes. Ann, let me start with you.

What are revolutionary technologies? What do they mean for geopolitical competition? And what do they mean for Canadian foreign policy?

Ann Fitz-Gerald:

Thank you very much, Jennifer, and good afternoon, everyone. It's a privilege to address such an esteemed audience. I would be there in person, but we've had a number of convocations this week, including today. So, I'm here with the students, but delighted to be coming in virtually.

I'll start by breaking down that question. What makes a technology revolutionary?

A revolutionary technology alters how power is generated, distributed, and exercised across states, across markets, and across institutions and societies. It is economically transformative. This issue dates back to the advent of the printing press in the fifteenth century, which was disruptive and we had to restore the equilibrium. We had to learn about copyright. We had to learn about plagiarism and all sorts of other policy orientations that went with that disruption.

Today, I would describe the disruption as bringing in a new general-purpose technology using different factors of economic productivity. We've gone from labor and physical capital to data, algorithms, large language models, AI etc. There's an intangibles economy at work which is affecting trade, foreign policy, security policy, everything. Although I come to this debate through a lens of defence and national security studies, the dual usage nature of this general-purpose infrastructure which will empower every sector of society makes me able to comment a little bit wider than just defence.

So, what is this new general-purpose technology? I like describing it as a car. It's easy for me to remember. It's easy for me to describe. The driver is artificial intelligence and the tools and the clouds and everything that comes with that. The engine is computational power. Compute crunches the data. The gas going into the car are the data because you need data for artificial intelligence. You need data for everything. It is the most strategic asset of any organization today. And the shell that goes around the car that protects it are the protections.

I would break those protections down into three parts. The first would be intellectual property. The second would be cybersecurity, and the third would be standards. And I want to come back to standards and the whole mission of standard setting in a moment.

The second issue I would break down from your question is: how do revolutionary technologies alter power? Well, they create strategic advantage and leverage. They create new foundations of power. It has not gone unnoticed that the United States, for example, has pulled out of 66 international conventions, treaties, and agreements in the last twelve months. But it has not pulled out of three. And this is very interesting. They are the International Telecommunications Union, the International Electrotechnical Commission and the International Organization of Standardization, the ISO.

What this means is that power is now at the plumbing level, at the technical level, not at the strategic level. It's not all about values and norms anymore. It's about trying to set the technical norms and standards which best support the economies and the industrial strategies of two geopolitical powers at this moment. It's all about plugging into one industrial strategy or the other and having rule setters and rule takers. And we are trying to be grafted into continuing to be a rule taker. There are new rules which result in a rentier economy where you have a landlord and you have tenants. The tenants pay all the costs and we have to accept the rules that benefit others.

In my mind, that's an area where we can take this middle power conversation. Middle powers can actually turn the rhetoric and discussion into action by setting standards that are aligned with our democratic principles - instead of this blurred distinction between public and private power that we see being exercised elsewhere in the world.

We accept certain narratives coming out of that new power structure at the technical level. In many parts of Canada, there is a narrative that has been accepted that we are in trade deficit or surplus in certain sectors with the United States. But if you think about how much the US monetizes Canadian data and then sells our data back to us through many different channels and also sells the insights from our data back to us, then you would easily calculate a large trade deficit across all sectors, especially the net present value of that trade.

So, what does this mean for foreign policy? It means technology is entering diplomacy, trade, defense, and economic policy. We've moved from eras of capitalism that have spanned the agrarian economy, to industry and industrial policy - the whole Marx principles. Now we are in an economy where 92% of the wealth of the S&P 500 is in intangible assets. What it means is that we have a data-driven age where competition centers on knowledge, technology, infrastructure and governance.

For Canada, that's an important issue. Because if knowledge and the ability to capture wealth dictates whether or not we are going to achieve prosperity, then we have to protect that knowledge with the protections that I mentioned, keeping a strong knowledge system, higher education, and creating pathways ways for the innovations that come from that knowledge. I will stop there.

Jennifer Irish:

That's a fantastic scene setter and also a good segue into the conversation I'd like to have with Vass. When we talk about foreign policy, you can't listen to a speech from the Prime Minister, or the Foreign Minister, or Evan Solomon, without the theme of sovereignty coming up. And yet there's no one sector, I don't think, where Canada is more dependent than in the technology sector, given that all of our technology platforms are controlled by the U.S.

What does sovereignty mean in the context of technology? What does it mean specifically with data and digital sovereignty and the implications for Canadian foreign policy?

Vass Bednar:

I'm going to do my best. One of my girlfriends pronounces sovereignty "sovereign-ity". I think that's important to remind ourselves that as a concept, it is kind of sensational, meaningful, aspirational, and dangerously vague, all at the same time. Personally, running a think tank that focuses on it, I'm terrified I'm going to spell it wrong.

I think technology means a lot in this regard. We are more aware of and awake to the risk of weaponized interdependence. But these interdependencies predated the Trump administration. Of course, they're just a little bit more willing to emphasize and extract from them.

In terms of the opportunities for Canada, an area where we've been weak in this moment, (and I think the word "moment", like "rupture" is one we can't use enough), is thinking about really deeply about the alternatives that we want to build and to own. I think it's very smart and appropriate for Canada to be building more sovereign compute capacity.

We are finally seeing more of a vision for how we're going to govern data with our privacy law coming forward. But do we want to continue to rent the suite of Microsoft Office tools for the next eleven years? My understanding is we're in like a nine or eleven-year contract. We need to realize the infrastructures that we rely on and seem to accept that we will be using in perpetuity.

Other jurisdictions are turning to open-source models or building alternatives that they will own. It was just reported that a jurisdiction—I'm forgetting which — is trying to build an alternative to Palantir. It was reported that the EU and the UK are exploring alternative payment systems.

Are we even having that conversation in Canada? Or are we cool with Microsoft and Visa's duopoly? Outside of the Trump administration, if we didn't have the situation that we're in, we wouldn't have even entertained or been as open to these conversations. What capacity, what alternatives do we want to build and do we want to own?

There is second opportunity that I think we're starting to see. How intriguing was it that a few days before pitching Canada on a new privacy and data law, the Prime Minister was signaling, hey, you know, we're super EU-like here. That's Canada. Well, is our legislative environment going to be EU-like when it approaches these things? That's a very interesting question.

Some of the opportunity that starts to come forward is the kind of policy coordination you're already tacitly seeing. We can call it policymaking all we want. But more often than not, when it comes to Canada — we're policy takers. We love a jurisdictional scan. We love to know what everyone else is doing.

I think part of the middle power opportunity is working in concert and working together. This domino effect of social media bans for young people is something that's happening very quickly. What other areas of coordination might we see that can be interpreted as new governance regimes for the technology that's come to dominate our everyday lives?

Those are two things I'll put in the window that we can continue to pick up again later.

Jennifer Irish:

Great. We've talked about technology and power dynamics. We've talked about technology and sovereignty. I'd like to shift the gears a little bit because I think we need to also talk about technology and funding and financing.

Raf, one of the game changers that hasn't been raised today is about cryptocurrencies. They are changing the way in which we support democracies. They also have a development component. Could take us through how cryptocurrency has become a game changer for foreign policy?

Rafal Rohozinski:

I will, but I'm going to step back just for a second and engage in the discussion that you had with Anne and with Vass. I think it's important to recognize that we're talking about Canadian foreign policy today, but we're situated in a historical moment. In physics, there's this interesting concept known as a three-body problem, where you have three bodies that orbit around each other, which cause patterns which are hard to predict. Historically, that's where we are. The three-body problem for us right now is made up of three things: demographics, technology, and geopolitics.

Demographics. Why? I look across this room here and I do not see anyone under the age of 35. Guess what? Reality is this: 2/3 of the world's population is under the age of 35. The vast majority of them are digital natives, meaning they have never known a world that has existed without a cell phone or access to the internet. Their relationship with their fellow humans - human agency - is very different than those of you sitting in this room who have been cultivated in a rules-based institutional order where your agency was defined as much by your position within an organization as it was anything else. That demographic mostly sits in the emerging world where technology has served to fundamentally change their ability to exercise their tech, their agency, whether that's to change things politically or change things economically. That will continue to drive things forward.

That intersects with technologies now that have become truly transformative in our era. AI is one. Quantum is the next one. Third one is actually cryptocurrencies. They've acted in different kinds of ways.

AI is important to recognize because it is the latest of the great transformational revolutions that we had in economics. We had the agrarian revolution. We had the industrial revolution, which effectively mechanized human tasks. We have AI, which is actually reducing cognitive tasks. But unlike these previous revolutions that we had, where there was a diversity of options available, AI and quantum are mostly centered around two countries that control 90% of both the talent and the resources - the US and China. That's a reality that we live in.

These transformative technologies occur at the same time as we've had the largest decline in an international rules-based order, which is principally important to be able to negotiate how these technologies impact populations in terms of equity, access, and ability to act. And that's a great problem.

Now, why cryptocurrency? Who here knows who is the richest Canadian? It's not Jim Balsillie.

Vass Bednar:

Is it the Ethereum guy?

Rafal Rohozinsky:

Nope. Changpeng Zhao. Anybody ever heard of him?

He is the head of Binance, which happens to be the largest cryptocurrency company in the world, which over the last five years has transacted $145 trillion in terms of trade. He was in Canada until we deregulated his company out of Canada in 2020. So, he's the richest Canadian, but his company isn't actually located here.

To give you a sense of what cryptocurrency currently represents, in sub-Saharan Africa, it's 13% of trade, rising by 52% every year. Trade which is no longer off-ramping in US dollars, trade which is off-ramping in yuan. Why? Because the balance of trade in sub-Saharan Africa is where? China.

Why has that occurred? It's occurred for two reasons. Cryptocurrencies are easy to use. All you need is a cell phone. You don't need a bank. But it's also a consequence of our foreign policy. Targeted sanctions have led to banks de-risking, and de-risking has basically meant leaving large swathes of the population in the emerging world unbanked. They've turned to the simplest tool they had to replace that, which is cryptocurrency.

In Southeast Asia, where we have a problem with scam farms, about $68 billion was transacted in cryptocurrencies last year. To give you a sense of that, that's about 43% of the total combined GDP of Myanmar, Laos, and Cambodia put together. The cryptocurrency economy is no longer just part of the digital economy. It's becoming the real economy. And this is maybe the symptomatic point here. While we think about technological transitions as being something that occurs here, where we hold the reins of it both in terms of access to the know-how and access to the capital, the reality is in the last twenty years this has become greatly democratized.

Last year in Bangladesh, we ran a hackathon funded by Global Affairs Canada. Just before the elections we were asking young Bangladeshis to come up with solutions using blockchain, artificial intelligence to help information integrity in advance of the elections. We had 200 teams that applied within 60 days of the election. The 20 teams that were actually selected would have won any hackathon that was done here.

But here was the eye-opening moment for me. The technology that was being used by these teams was identical to that which would have been used by students at the University of Waterloo. Their knowledge of how to use those technologies was exactly the same level. In other words, that digital divide no longer existed.

But here was the difference. Students at the University of Waterloo are a solution looking for a problem. They're bright, but they don't quite know what they want to solve. In Bangladesh, the students knew exactly what problem they wanted to solve and were able to put the technology to make it happen.

That's the great transition. That's the great canvas against which much of what we discuss here happens. And the challenge is that from a foreign policy point of view, we haven't recognized that Canada's strength lies in being able to harness our leadership in technology to build new relationships that are different than the old economy that we keep talking about that we need to preserve with the United States.

It's an opportunity space that remains unexploited. One which probably, because we're talking about the commanding heights of the economy for the next century, is more worthwhile talking about than the auto industry in Ontario or agriculture in Saskatchewan.

Jennifer Irish:

I want to pick up that strain about democracy and hackathons. Here at the University of Ottawa, we featured Taiwan's experience in protecting its general elections from an onslaught of industrialized disinformation from China. They basically used a volunteer hackathon culture to do that work in real time, to debunk and protect democracy.

I'm going to turn it back to Vass on the theme about information integrity, disinformation, the distortion of AI, and how that fits into that sovereignty agenda.

Vass Bednar:

I think we're seeing something with how Google is collapsing search that plays into everything. The Google summaries are revolutionizing the economics of advertising and of search. But we're still speaking about search and sort of accessing information online as if it's just a few extra clicks away. We're all operating on the presumption that information that we want, information that we once saw, is out there in that very kind of X-Files way, like “the truth is out there”.

I think it's worth asking what happens when it's just not anymore because of those vectors of control are intentionally thwarting that. I think of the recent example in May, for any subscribers to Nate Silver's FiveThirtyEight blog. That was Disney making a particular decision, but boom, it's just gone. It's not even going to be archived.

I hope that Canada can start thinking more carefully and more intentionally about our collective history, and how we come to know ourselves. When we have that cultural conversation, it's pent up right now in should streamers pay into Canadian cultural funds? How do we have the authority? Are we making this a compelling case to import our broadcasting regime? We're not speaking about what is otherwise seen as something that's reserved for librarians, or volunteers.

Is the solution a Wayback Machine for Canada? No, not quite. But my understanding is that Internet Archive Canada is localizing information in Canada and building a version so we can start to have that history. We need to preserve more and more communication that is happening in a way that's never documented at all. Disappearing stories that are designed to sort of have an impermanence. Information has always had that as a quality, but not quite in the way of our digital histories. There are AI-generated historians, there are people who perform as historians online with YouTube channels as if they are relaying authentic information, intentionally skewing our public record of what history is. Other times, they are importing a computational version of a person into a historic scene itself, which is more surreal and strange. I think that material needs to be captured, documented, understood, so that we can understand ourselves, but also understand what's happening in terms of the new forms this kind of manipulation can take.

Sorry, I gave you a long and winding answer. It probably makes it seem like I'm on the computer all the time scrolling, but I swear I'm not. I just think it's been a little bit harder for us to think about this.

We have an access-to-information problem. We have an online pollution problem. More and more content is being created that's synthetic, that's not real, that's then being used to train itself into models. We see search itself, like any digital system with its negative externalities, being gamed by material that is then put on Reddit. Or again, trying to game that algorithm and game that system.

What do we want to build? And what is the role of the state in curating and supporting the maintenance of our knowledge economy?

Jennifer Irish:

You raised that issue about the need for strong narratives because we are in a state of active information warfare and cognitive warfare now. Those are things that are not necessarily seen by our population. But the way of combating it really depends on us being able to project a common narrative, which has been a challenge for Canada. It will be instrumental to positioning ourselves in this cognitive space and doing cognitive forechecking in this space.

I want to bring it back to Anne on the theme of how information distortion, how technology is changing warfare more generally, including conventional warfare. We've seen in our world of polycrisis a series of asymmetrical wars. What does that mean for foreign policy when that's also combined with distortions in the information space and cognitive warfare?

Ann Fitz-Gerald:

I think the cognitive and warfare and psychological warfare issues are hugely important. Something that hasn't been mentioned is the importance of a strong media ecosystem and governance authority over that media ecosystem. I think we all live in our individual information bubbles. I have my go-tos in my bubble. You all have go-tos your bubble - Politico, The Economist, Globe and Mail, whatever we have time for or not. You can think about the bubbles that are represented in Canada here. The key bubbles that are mandated with that task, or the actors within the bubbles, need to be strong and well-resourced and well-governed.

One thing I'll say is the increased nature of autonomy warfare. You mentioned the five domains. We've gone from land, sea, and air, to land, sea, air, cyber, and space. We can't afford strong capability across all those domains. Very few countries can. But we need to prepare for that autonomy better in the future.

I would commend, if you haven't read it already, Prime Minister Meloni' s speech to Parliament a couple of weeks ago. She was the first European leader to really speak out following events like the breaking up of the coalition between France, Germany, and Spain around the purchase of fighter aircraft, do we need a whole different approach?

This is something I've been really thinking about. I've been working on reimagining defence because of the importance of autonomy across those domains and how humans in the defence realm are moving from direct operators to supervisors of machine-enabled systems. This relates back to the knowledge economy that we're living in as well and the machine-based knowledge economy.

War is also becoming data-driven. It's the most strategically important asset for states and businesses and organizations in conflict and war as well. Sensing, collecting data, the low-level satellite communications - we saw the role that they played and have been playing in Ukraine. The processing of data, the speed of decision-making, who can see, understand, decide, and act the fastest. We see war becoming much more cheap and much more scalable. Low-cost drones can destroy tanks, ships, and advanced air defense systems, Automation brings economy of scale. It lowers cost, and oddly enough, increases affordability in some communities and societies.

We see increasingly targets that concern infrastructure. I study insurgency and now algorithmic insurgency. Key infrastructure is under attack. I think that's why defense has to be reimagined as well, because grids have to be protected, undersea cables have to be protected, any critical infrastructure that connects with our most strategic assets such as data centers or quantum computing centers. That's broader than the traditional national defense culture.

War increasingly blurs domains. War is persistent these days. It doesn't come with boundaries between peacetime and wartime, between civilians and the military. That's a blurred distinction now as well. Between public and private. Look at Palantir. Look at what Elon Musk brought for the low-level satellite jamming in Ukraine. I would say for foreign policy becomes more about technology and the new general-purpose infrastructure.

Middle powers matter differently in this space. It's been interesting watching the defense ministers and the discussions going on in Brussels at the moment, as NATO confronts issues concerning data sharing. Alliances also will evolve in this space. What does autonomy mean for a collective security organization? And governance becomes crucial.

I'll go back to that standard-setting comment that I made, that middle powers need to be rule-makers, not just rule-takers. We need to come together. When we do, we're very powerful. We saw that over Greenland. We can do that over standards concerning the use and application of technologies.

Jennifer Irish:

Raf, I know you're itching to get in. I hope you can also bring us into how this agenda has affected intelligence as well. At a time when there's a rapidly evolving threatscape, it's never been more important to understand the world. AI has accelerated all this. So please weigh in on decision-making and warfare, but also please talk to us about the effects on intelligence.

Rafal Rohozinsky:

Sure. Since we're the last panel of the last day, I'll try to make it entertaining. Does anybody know why the year 2023 matters or its significance? Anyone?

2023 is the last year that you could be certain that a piece of data was not synthetically created by AI. Hugely, hugely important.

We tend to think of the contest over AI as being just algorithms, better models. That's true to a point. Capable models give you better reasoning. They can be fast. Vast amounts of money are being put into it. This is truly the battle over the commanding heights of the economy. If you take together all of the major publicly funded programs of the U.S. of the last century – the Manhattan Project, the Apollo Project, rural electrification, the creation of the interstate highway system – bring them all altogether, that investment is less than half of what is being put into AI buildout of infrastructure in the US over the last two years. So, the scale is absolutely vast.

But the challenge is the 2023 problem. And here's the sort of dirty secret in the AI industry that no one talks about. It's called the Habsburg AI problem. Do you remember the Habsburg Empire? Prior to the First World War, one of the largest empires in Europe, economically, military strong, whose leadership was increasingly inbred and unable to take decisions. AI has exactly the same problem. The models may be getting more capable, but the data that they ingest in order to make that reasoning over time get weaker and weaker and weaker.

Why? Well, the first generation of AI was trained by harvesting basically all of your data on the internet, as well as everything in Wikipedia, using pre-2023 data, which means it was verifiable. Currently, all the major models are ingesting what's known as AI slop, synthetic data. Increasingly, that synthetic data is what trains those models in current affairs.

Let me give you an example. *The New York Times, the Washington Post, The Economist*, prevent AI models from scraping their content. At the same time, the Russian government and the Israeli government have been very smart about creating hundreds of websites that basically reinterpret facts according to their own perspective, which being hoovered up by these models and effectively used to provide their outputs.

This matters to us for two reasons, one strategic and one maybe societal. There are only two countries that currently operate large-scale language models at scale, China and the United States. This is not just economic capture; this is a cognitive capture. As we become more dependent on these machines to interpret to us facts, the facts that are given to us are the facts that those machines are creating themselves based on the AI slop that AI created.

AI cognitive capture, or epistemic capture, is a primary issue that we need to be talking about in AI governance loudly more than anything else. So, where's the opportunity? The opportunity— and this is how it ties into intelligence— is that it's no longer just how good your model is, it's how trusted the data is that you could put into that model. At the end of the day, data, like politics, is local. A model that's trained on unique data that describes agriculture in Saskatchewan will be far more useful to farmers than a model that ingests all the agricultural information in the world, right or wrong. An AI model which is trained uniquely to interpret MRIs is far more useful than a model that gives you a reflection of all the theories of health that you get on ChatGPT. That's where Canada's advantage is: defining where we can create unique data for unique models.

Fortunately, or unfortunately, at the moment Canada is a leader in the three key technologies that are currently driving change globally – the commanding heights. We produce 10% of the world's AI research talent. How much does that get reflected into companies and company value? 0.001%. We are currently leaders in quantum technologies, which we didn't even talk about today, but which would be also important to talk about. We are also leaders in crypto technologies and its application. Do we talk about that in terms of foreign policy? Maybe. Maybe not.

Jennifer Irish:

I want to end this round because I do want to open it for questions as well. We've talked about protection of democracy. We've talked about the need for whole-of-society approaches. But we haven't really talked enough about how to mobilize our public. Is our public really aware of these types of threats, and how do we ensure that there is some immunity, some inoculation, some cognitive forechecking that involves our population?

By way of example, one anecdote I shared with the CBC recently was on a website that appeared during our last federal election about Canada as a 51st state. Along with the Media Economic Ecosystem Observatory in McGill, we have been doing some tracking of this website, wondering how quickly it had come up in the election cycle and what the origins of it were. It turned out this website had started off as a real estate exchange website. It gathered tens of thousands of followers. And then it was sold as a shopping channel. It was a place where Canadians could share information about what could be bought and sold. And it did this 7 times until a group in the United States bought out the website with its tens of thousands of followers and repurposed it as Canada's 51st State. It was accelerated first of all by Canadian groups having the same agenda, and then by Russia.

The reason this came to our attention because there were Canadians who didn't realize that they were associated with this website and were wondering why. But the other issue is that the algorithms know that these people are associated with the website, whether or not they joined it or not. All those people who never became aware that they were associated with this website because of its genesis were all of a sudden getting in their feeds all this news about Canada as a 51st state and the importance of Canada being a 51st state. So that's how nefarious it is. We're not talking about what is true and what is false. We're talking about manipulation of algorithms and industrialized disinformation.

My question, which I'll put this to you first, Vass, is how in this climate, what is it that we need to do with the Canadian public to ensure that first of all they are literate about this agenda, they are conscious of the threats, and they become part of the solution? Because they need to be.

Vass Bednar:

I think there's a very dangerous myth that we sometimes perpetuate that our online environments are quote unquote free. All markets have rules. The question is whether they're democratically set and accountable. When we don't do that, that's a choice as well. Private actors set the rules and the terms in their favor.

Algorithmic curation is very interesting in that a lot of people feel they truly have a sense of capital P power over that system. It's influenced by what they viewed before, where they go. It feels personalized in a way that isn't spooktacular in a surveillant way, where you're acknowledging the manipulative nature less often. Instead, it feels like it's something that belongs to you, that you own almost built, right? You know, what's going to surface a deal for you, or a song, or a place to go on vacation. I wonder about how that work can be done together, but I never like the idea that everyday people are responsible for this in some way, as if we just educate harder or do a really good campaign, we're going have a kind of awakening. But I agree with you that it's something foundational there.

If I can share a super small thing in case you hadn't heard of the Canadian Shield Institute. I think that is my job because we're new. Starting in July on Canada Day, we're the research partner for season 2 of Stephen Marche's podcast *Gloves Off*. This season is all about what else Canada needs to be doing in those policy elements - the cognitive stuff, tech, interdependencies. I feel like this is the perfect audience - it's a show made for Ambassadors Canada.

Jennifer Irish:

Anne, you've also talked about whole-of-society approaches. What does that actually mean in the context of these threats that we're facing and their complexity?

Ann Fitz-Gerald:

I think all roads lead to capacity building. We need to build capacity at all levels. When I graduated from Queen's Commerce many years ago–before I went into political science–I had a textbook, Lipsey, Smart and Steiner. It was fantastic. A lot of us used that textbook. A lot of the same economic textbooks are still circulating, based on a 1950s, '60s economic model. But we need to acknowledge that we have moved from a tangible economy and tangible wealth to intangible wealth. We need a policy orientation towards that.

We are seeing signs that the academy needs reform. A university today is probably not going to look like the same thing and designed around the same faculties and departments, or even the same number of universities, in 15 years' time. So, let's get ahead of the curve. Let's look at what does autonomy mean. Raf mentioned problem solving. Let's identify the problems and let's build a curriculum around those problems.

I would also say we need to think about our economy like a balance sheet. On one side is the revenue. We have to grow that pie to keep good people here and not just have organizations like Meta, Google, Anthropic publicly thank Canada for providing their senior management teams. To do that, we need to boost paycheques. To grow that pie, we need to get in the business of value-added productivity, not just the base products going out the borders, but building on those base products. The Build Homes Canada program should not just have to do with lumber and aluminum and steel, which are all terribly important, but also the high-efficiency HVAC systems – designs that the rest of the world needs and wants. That's value-added productivity.

On the other side of the balance sheet is the affordability question. I was away from Canada for 21 years and I came back and it's wonderful to be back. Biggest dream of my life. But it's a very, very expensive country, even compared to the European countries that I have lived in. To address affordability – and Vass is the queen of this subject – we need a pro-competition environment. We need to give consumers choice. We need to incentivize entrepreneurialism, get behind our SMEs, grow them, have rules. We have to buy, partner, and sell. But we need rules around each of those areas so we capture wealth and we support our productivity. So that we don't just build the hardware and sell the hardware and get the hardware end of the deals, but we get the software as well and the rich patents and the value-added patents and trade secrets that we want to protect. We all know that the technology that empowered all three or four of the main COVID vaccines was founded in a UBC startup lab with a professor and a couple of RAs. We didn't value it, and a big company from Texas came, snapped it up, and made billions a year. It is making more billions because there are now cancer vaccines and other vaccines that use that technology. So, I would say capacity building, value-added productivity, and getting behind both those agendas.

Jennifer Irish:

So, Raf, some rapid-fire points before we open it up for a couple of questions.

Rafal Rohozinski:

When President Trump slaps the tariff on autos in Ontario, the plant stays in Ontario. When he slaps tariffs on agricultural goods, the grain is still standing in the fields. If he weaponizes access to digital technologies, this country shuts off overnight.

Overnight because we are 90% dependent on data centers, desktop technologies, and AI infrastructures that sit south of the border. We own two fiber optic cables that connect Canada to the rest of the world, and one of them goes to Greenland. We are a digitally landlocked country.

Digital is everything. Digital sovereignty is everything. Unless we're able to establish that, we don't have an economy that we can grow because this is the foundational part of the global economy going forward.

We need to establish that by capitalizing on what we have, which, as Anne said, is both ample human resources as well as R&D. But to translate that into something tangible, building companies, to do that, we need to be protectionist. We need to be aggressive in terms of exports. We need to be able to look at markets which maybe aren't the easy markets south of the border that we've been used to. Maybe they're the high-value market where Canadian know-how actually makes a difference.

We also need to look at this as a nation-building process. Canada, at the end of the day, was built coast to coast with the railway. Canada will be built for this century coast to coast to coast through a digital infrastructure.

Jennifer Irish:

We can open it just for maybe a couple of questions. I'll take a couple together.

Olivier Nicoloff:

I have a question online. It's coming from May Elboury:

“When we're talking about data capture, maintaining records and archives to analyze information, what are the best ways to store this information? It seems a lot of big organizations who often are making it more challenging to easily access information are also the ones with the largest, most robust platforms on which to store these records and information.”

Vass Bednar:

I think that's part of why you're seeing this bigger conversation around data localization. But as this room knows, just because data is localized doesn't mean that it isn't subject to US laws like the CLOUD Act and FISA. That's something else that Canada is grappling with when it comes to this infrastructure.

To Raf's point on our history and our future with digital sovereignty, we're at the wonderful University of Ottawa. Researchers here built a kind of intranet internet that is sovereign and secure, that's kind of a really cool model for communications – Canarie. Canarie should be having its moment in the sun. Canarie should have its own little heritage moment. We've done it before. We can do things like this again. But we can't hold our breath and just hope that these threats are going to go away if there's a new administration in the future.

I know that's silly to say to this room because of course we accept it. But I find myself almost appreciative, almost relieved – even though it's a kind of stressful and squeezed situation for Canada – that we're able to have these conversations and do these assessments around how are we managing those intangible assets. Where have we fallen down before, and how are we going to stand up?

Audience Member:

Thank you so much for sharing with us a very challenging topic with a lot of opportunities. I will introduce my questions, starting with kind of the challenge you are seeing every day in the finance policy and the program world I'm dealing with. My team is overseeing $118 billion investment for housing, infrastructure, and the communities. Before 2023, when I reviewed the work from my team members, I could actually trust their work because the data they were using was TBS policy or references to that, and the data were actually from government sources. But after 2023, after AI is introduced, when we review the products from team members have to pay particular attention to see certain things because a lot of the young generation don't actually go back to the original source to double-check the accuracy of the data anymore. Sometimes they're making the fundamental mistakes which we would never see before 2023.

So, my question is, as Anne mentioned earlier, we're no longer the follower of the rules but the maker of the rules, how we can make sure the data feeding into all these advanced platform technologies are accurate, trustworthy, and also accessible with the control we want to ensure the security moving forward?

Jennifer Irish:

So, so I'm also going to take a question at the back of the room and then I'll ask the panelists to answer those questions and incorporate final thoughts as well.

Sylvain Fabi:

My question is related to what you said, Raf, when you talk about the big AI companies and models. I thought what you said is that AI is now creating information regardless of where it comes from, and then it re-feeds into itself, which should be very significantly reducing the value of these models. But it doesn't seem to be the case. Am I right? Am I wrong? They still seem to be very attractive to investors. I was wondering if you had some thoughts on that, whereby at one point you will have more what I would call closed-loop AI systems. My daughter's a lawyer. If you could have a closed-loop AI that takes information from all the pertinent websites or sources of information about law. I think it exists, actually. But your thoughts on what the value eventually will become of those big AI models which at one point will be 100% corrupted.

Jennifer Irish:

Raf, why don't you start this round and answer both questions and any final thoughts?

Rafal Rohozinski:

I think history teaches us that first movers in the market generally aren't the ones that last for a long time. All of you probably remember when the federal government invested heavily into Wang computers. Remember Wang computers, which were meant to solve word processing? They disappeared, much for the reason that large language models will disappear, and that centralized computing doesn't actually give efficiencies. That's why I said earlier on that small language models and highly curated datasets are likely where we're going to see a lot of value. It's going to be the MRI machine that runs an AI that can actually detect tumors that's going to make more value than these large-scale general-purpose technologies. That's not to say that these general-purpose models aren't going to be around for a long time. They will be.

The other thing to consider though is this is only one model. We've grown used to the fact that Silicon Valley for the last 35 years has created a global public good that people have uncritically publicly accepted as being a global public good, whether that's Microsoft Word, whether that's Oracle, etc. That's no longer the case right now. If you talk to a Chinese businessman and you say, show me your AI, they're not going to point to the cloud. They're going to point to a hardware box in the corner. That's the model of AI that we're seeing now propagate wildly around the world. If you go to Syria right now, Syrians can't access ChatGPT or Anthropic. But they can access dozens of Chinese models that are available for them to run on hardware that they buy from China. That's happening across the developing world. That's the alternative, and that's what mitigates against, you know, this aggregation that we see.

For Canada, the advantage, to sum it up, is this. We didn't talk about quantum, but quantum is a big deal because currently any encryption that is used to secure any data that we have right now is subject to have being broken by quantum means when those means become available on a commercial scale. This means that the challenge of the root of trust is really the next challenge beyond AI that's going to be fundamental over the next 10, 15 years. Why that matters is for two reasons: trusted data and creating trusted data that will create models that are both trustworthy and usable. The country or that group that is able to master both at the same time will lead far more than just those that are currently moving into AI models. Creating a root of trust also is going to be fundamentally important for any society to maintain the kind of trust that right now exists cryptographically, but which is subject to breaking by quantum means. If I was to prognosticate and say where are we going to be in 10 or 15 years, I think we're actually going to see blocks of countries that share a cryptographic root of trust. That that's going to be the new geography within which we operate.

Jennifer Irish:

The challenge with quantum also includes all the data that China has been collecting for year, whether it's encrypted or not, as part of its social engineering and as part of its probe for the future.

Anne, you get the last word after Vass for the whole session. Vass, please come in.

Vass Bednar:

Anne mentioned printing press earlier on. When models are cannibalizing themselves as we're seeing, we sort of slide away from printing press along a spectrum and we get closer to Beanie Baby. That speaks to some of the potential market inflation that we're starting to see at the same time that Canada is doubling down on the adoption of this technology, Starbucks, Pizza Pizza, they're not using proprietary algorithmic systems anymore because they just didn't work. You were saying we've accepted big tech in our lives. For whatever reasons with these models, we've accepted their defectiveness as a feature, and not something that as consumers, as purchasers, as business that we're saying is unacceptable. In fact, if anything, we're saying, if we just give it more information or train it a bit better or a little bit harder, it'll improve. And that is, I think, an interesting aspect of the geopolitics of this technology, not just for access and localization and export controls and dominance, but also for design and reliability and true trust. One of the top ways to earn trust in technology is to have a product that's trustworthy.

I'll close by saying never before in history has there been such a presumed strong role for the state to support the adoption of a particular technology. I've taken a look at the historic rates of adoption for different hardware and software, smartphones, personal computers, home phones. What we are assuming will happen with AI is the rate identical to smartphones. But don't that forget pagers and flip phones predated and normalized that technology. It's super interesting.

Jennifer Irish:

Anne, you set us up, so please take it home.

Ann Fitz-Gerald:

I just want to say that the question in the chat that was read out is a really important question. Actually, it stumps a lot of us, and because I'm an academic and have to learn about these things, I've chased the answers. We have very underutilized data centers in Canada. We can house Canadian data. The problem here is that Canadian data is not secured and harnessed. We could have the best AI strategy in the world, we could have the best supercomputer in the world, but if our data is not harnessed, all of those developments will be undermined. We have uniquely structured health data. We have the information under lock and key of every Canadian's health from birth to death. That is a goldmine for innovations. We have the most diverse multicultural capital of the world in Ontario, Toronto, and it's a provincial capital. We could be the centre of the universe for clinical trials, biotech, gene therapy, etc. And that's just one sectoral example. But we need to secure our data. It's nothing more than leasing space at a data center, putting a rack down if you're a government agency or an organization. Don't renew your contract with Amazon Web Services when it comes up for renewal, and we'll relocate your data feed to that rack in that data centre.

But it's not just about technical solutions. There is a governance side of the equation, which is really important. This feeds into Raf's point. If the data sources are not trusted, then nobody will trust the opportunities that AI could bring. We need to show our public that the sandbox is Canadian. Okay. Are we relocating our data, harnessed under Canadian lock and key and under Canadian legal frameworks too, then not only will Canadians trust the AI solutions, but other countries in the world will see Canada, predictable democracy, and say, I want to store my data in those data centers. I want to have it governed under those standards and principles. So, bring on that middle power discussion and let's start setting new standards and be rule makers, not rule takers.

Jennifer Irish:

I think you managed to leave us on an uplifting note. Thank you to the panel. Fascinating discussion.

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