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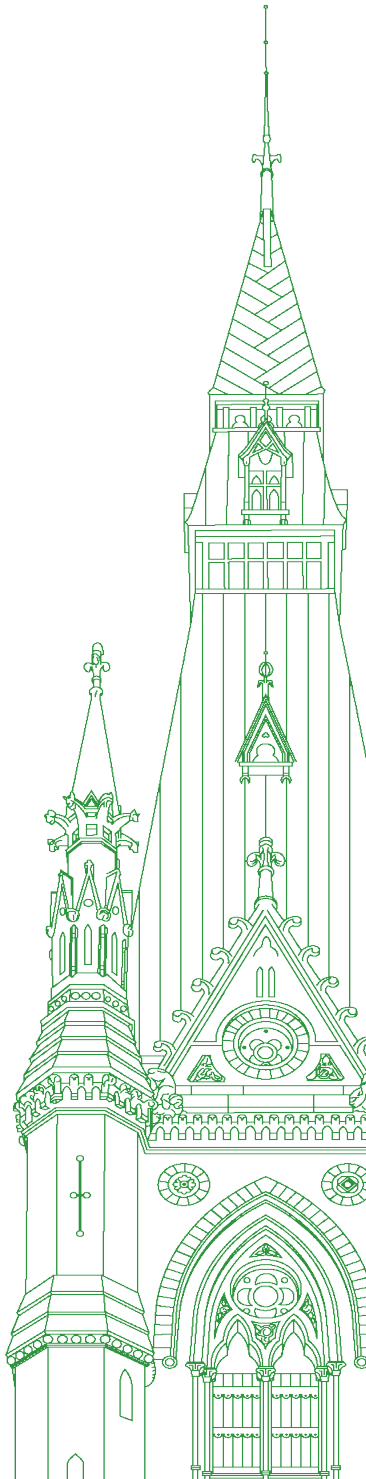

Chair: Mr. Lloyd Longfield

Standing Committee on Science and Research

Thursday, February 8, 2024

● (1100)

[*English*]

The Chair (Mr. Lloyd Longfield (Guelph, Lib.)): Welcome to meeting number 72 of the Standing Committee on Science and Research.

Today's committee meeting is taking place in a hybrid format. We have all the members in the room here in person, but we do have a few witnesses who will be remote.

For the witnesses, you can chose the official language of your choice on your screen by choosing floor, English, or French. If interpretation is lost, please let us know right away, and we will make sure that it's restored before we continue with our proceedings.

If you could wait until you're recognized by me, that helps the meeting flow well, and directing comments through the chair also helps.

When you're not speaking, please make sure that your microphone is on mute. For those in the room, make sure that your earpiece is kept away from the microphone so we don't have feedback events on our translators. We want them to be safe throughout the meeting, and we do not want to cause any hearing damage because of our earpieces being too close to the microphones.

Pursuant to Standing Order 108(3)(i) and the motion adopted by the committee on Monday, September 18, 2023, the committee resumes its study on the integration of indigenous traditional knowledge and science in government policy development.

It's my pleasure to welcome Marjolaine Tshernish, the executive director of the Institut Tshakapesh. We also have Carole Lévesque, who is a full professor at the Indigenous Peoples Research and Knowledge Network, and we have Chief Jessica Lazare, from the Mohawk Council of Kahnawake. She is here. She just came in from Montreal, so she'll be joining in time for her speaking slot.

With that, we'll start our presentations of five minutes each, and we'll start with Carole Lévesque from the Indigenous Peoples Research and Knowledge Network.

Thank you for joining us, and we look forward to your testimony.

[*Translation*]

Mrs. Carole Lévesque (Full Professor, Indigenous Peoples Research and Knowledge Network): Good morning. I'm happy to be here today.

As you just heard, my name is Carole Lévesque. I am an anthropologist and have mainly worked with Quebec's indigenous communities and governing bodies for more than 50 years. Throughout my long career, it has been my privilege to work together with indigenous leaders and knowledge-keepers and to explore numerous societal issues such as health, education, the status of women, the environment, urban realities and public policies targeting indigenous populations. Regardless of the concerns we have addressed, however, one common question has constantly emerged from the discussions we have had together, both then and now. And that question concerns the place and acknowledgement of indigenous knowledge systems within society, whether in universities, governments or the indigenous community world.

Nearly 25 years ago, a number of indigenous and non-indigenous colleagues and I established the Indigenous Peoples Research and Knowledge Network, commonly called the Dialog network. Within that framework, we have worked hard to build a new relationship between the university and indigenous worlds, striving together to build knowledge and take into consideration indigenous perspectives, aspirations, practices and competencies in research and the advancement of knowledge. We firmly believe that the key to reconciliation with indigenous peoples is to create ethical and shared engagement spaces, as we have done at the Dialog network.

Based on our joint contributions, we have identified three challenges inherent in the work of the Standing Committee on Science and Research.

The first challenge concerns the status of indigenous knowledge. References to the integration of indigenous knowledge, as here proposed, greatly restrict the scope of that knowledge, both scientific and otherwise. As is true of science, branches of indigenous knowledge must be understood as constituent parts of systems, that is to say, of bodies of organized, dynamic, organic and independent information. These systems consist of data, of course, but also of practices, devices, skills, intellectual operations and collective actions. Consequently, the objective of making room for knowledge in public policy development cannot be reduced to the mere integration of various types of information, as appropriate as they may be, in the body of scientific knowledge. It is more appropriate to build bridges of understanding between the sciences, which also operate as systems, on the one hand, and indigenous knowledge systems on the other. As you will agree, it has to be admitted here that science is far from unequivocal. For example, the explanatory methods of the natural sciences are very different from those of the social sciences and humanities.

The second challenge that I would like to discuss is the challenge of public policies per se. Are we just talking about environmental policies, or are we also discussing social policies? The question has to be asked because environmental science discourse dominates discussions of indigenous knowledge. There's a reason why people talk so freely about ecological knowledge. I—

● (1105)

[*English*]

The Chair: We have a frozen screen here, so I'll put a pause on that and see if we can get her restored.

Mr. Gerald Soroka (Yellowhead, CPC): She could just be emphasizing a point, though.

The Chair: That's right. She's letting us think about it.

While we're waiting, Marjolaine Tshernish, could you please turn on your microphone and we'll do a quick sound check on you? I understand we had some technical difficulties.

[*Translation*]

Ms. Marjolaine Tshernish (Executive Director, Institut Tshakapesh): *Kwe kwe*.

You can't hear me, can't you?

Mrs. Carole Lévesque: So we're talking—

[*English*]

The Chair: Okay. Thank you.

[*Translation*]

Mrs. Carole Lévesque: Is that better?

[*English*]

The Chair: Okay. I'm sorry. We paused you, but now we're back, Carole.

I'll start the time.

[*Translation*]

Mrs. Carole Lévesque: All right. Thank you.

[*English*]

The Chair: Okay. Please go.

[*Translation*]

Mrs. Carole Lévesque: People immediately assume that homelessness is the same for everyone. They don't think clearly enough about the various types of homelessness experienced by indigenous persons. Taking a closer look at it, you realize that the pathways of homeless indigenous persons are different enough to require specific solutions that reflect the common practices and the ways in which people are socialized in the indigenous world. Those practices and socialization methods are also an outgrowth of indigenous knowledge systems. In many respects, knowledge systems can eliminate the grey areas that exist in the sciences. Sometimes when we take those systems into account, we can have a very positive effect on the hierarchical and linear failings of the sciences, both social and natural.

The third and last challenge that I'd like to discuss here is the open and intersecting nature of the sciences. The issues that arise today aren't new. Thirty years ago, in the wake of the 1992 Convention on Biological Diversity, the federal government promoted a large number of initiatives designed to document and characterize indigenous ecological knowledge in a broad range of environmental fields. Apart from a [*Technical difficulty—Editor*] followed from it and that, in a vast majority of cases, remained confined to the scientific community, it is now obvious that very few lessons were learned from those projects. Too little information has circulated within indigenous communities and governing bodies, and too many studies have overlooked the social and cultural aspects of that knowledge.

So that's the situation—

[*English*]

The Chair: We'll have to call time there. We're a little bit over. We got part of your conclusion, but maybe we can get the rest during comments and questions. Thank you for your testimony.

We will now turn to Chief Jessica Lazare from the Mohawk Council of the Kahnawake.

It's great to have you here.

Chief Jessica Lazare (Mohawk Council of Kahnawake): [*Witness spoke in Mohawk*]

[*English*]

I am Chief Jessica Lazare from the Mohawk Council of Kahnawake. I would like to thank the committee for the opportunity to participate in such an important and interesting study. I am not someone who studies or has studied science. However, today I will be speaking from my lived experiences and the teachings that have been passed on to me from elders, colleagues and knowledge-keepers. The key messages I would like to pass on to you today are rooted in these teachings.

I presume that the work you are doing in this study is to take a deeper look at two very different world views in an attempt to resolve conflicts between these two knowledge systems. Often, confliction can arise when focus is on the differences. It is important to also see the similarities to realize that there are different perspectives and approaches to reach common goals. These two knowledge systems can complement each other and aid each other in the full understanding of sciences.

Our knowledge system, the Kahnawake knowledge system, stems from our language. The language is intrinsic to our world view. It is based in verbs and it is based in actions and what we see, what we hear and what we observe. It holds teachings about science and demonstrates that my people have understood the science of the natural world, the relationships therein and the necessity of the balance with all living beings. To be honest, it will be very difficult to explain this in ways for you to fully appreciate this within five minutes and without the people who hold a very high proficiency in the Kanien’kehá:ka, or Mohawk, language.

Land is also an important factor when studying indigenous knowledge systems. When you are indigenous to the land, you possess an understanding of the natural system that is taught through generations of coexisting with the land. It is taught through a language that is older than your family generations who have been settled here. When settlers initially arrived here, the environment was not kind. The types of sustenance available here were not kind. This land and its elements were completely too foreign for the European biology. However, first nations taught settlers how to coexist with the land and taught them the medicines that helped them survive the ailments that were foreign to these newcomers.

There is also a need for discussions on how western academic education systems have sought to discredit indigenous knowledge systems simply because they were different. It is evident in the history of residential schools. This can be examined as an example of the systemic barriers that first nations have faced.

Moving forward, policy must acknowledge indigenous knowledge as equal to western knowledge. We can collaborate to better understand the ever-changing world around us and use our respective knowledge systems to achieve common goals. We may come from different lands and speak different languages, but we can find a common ground to communicate in. Through your study, I hope you will find a way to do that through policy development.

If there is one thing to remember about this speech, it is that in order to resolve conflicts, we must have an open mind to understand the different perspectives. I ask that you listen to understand, not to respond, as you ask me your questions.

Niiowén:nake.

● (1110)

The Chair: Wonderful. Thank you very much.

For our last presenter, we'll go to Marjolaine Tshernish for five minutes, please.

[*Translation*]

Ms. Marjolaine Tshernish: *Kwe kwe.*

I would like to thank—

The Clerk of the Committee (Mr. Philip den Ouden): Pardon me, Ms. Tshernish.

My name is Philip den Ouden; I am the committee clerk, and I would like to verify something.

We hear you, but I don't think the sound is coming from your device.

There's a microphone at the bottom of the screen, and there's also a small arrow. It would be good if you could click on the arrow and select the microphone based on the name corresponding to your headset.

Ms. Marjolaine Tshernish: Can you hear me? Is it working at your end?

The Clerk: We hear you, but we think the sound is coming from the microphone on your computer, not the one in your headset.

Now we can't hear you.

● (1115)

[*English*]

The Chair: I think we'll have to have technical support reach out to you to try to solve the technical issues so that we can continue with our meeting. If you could just be on the line with technical support, we'll go to our first round of questions of six minutes each. Once we have the technical issue resolved, maybe we can get your five-minute presentation in and work you into future questions.

For now, let's start with Gerald Soroka for six minutes, please.

Mr. Gerald Soroka: Thank you, Mr. Chair.

Thank you to all the witnesses, especially Chief Lazare, for coming today.

I'll start with Chief Lazare.

I've heard from many indigenous members about the lack of consultation from the Liberal government on the firearms legislation and its impact on indigenous communities. Do you believe your voices are being heard now when it comes to indigenous traditional knowledge and priorities within the federal policy-making process?

Chief Jessica Lazare: I believe there are still efforts to be made for adequate consultation. This is not just an issue for the Liberal government, but for all governments throughout decades and decades of colonization and the Canadian government trying to suppress indigenous peoples, indigenous knowledge and indigenous systems, because it is very different from what the settlers came here with.

This isn't unique to just one government or another. It's something that is consistently a challenge for first nations and indigenous peoples in Canada.

Mr. Gerald Soroka: How can a government improve its consultation process to ensure that indigenous perspectives are adequately represented in policy decisions, particularly in areas that affect traditional practices and rights?

Chief Jessica Lazare: Do you have a whole day to listen?

Honestly, to make it short and sweet, I would say, provide those spaces and provide the opportunity for indigenous peoples to provide their voice and their opinions and to be able to speak on their knowledge. We have a vast majority of talent and knowledge-keepers in our communities who hold different levels and different proficiencies of knowledge that they can contribute to policies and law-making to ensure that Canada is not overstepping on our rights and interests.

Mr. Gerald Soroka: Thank you for that.

I'd like to ask each witness questions, so I'll go to Dr. Lévesque now.

From your research and collaboration with indigenous communities, what key principles would you recommend for the successful integration of indigenous knowledge into governmental policy development?

[*Translation*]

Mrs. Carole Lévesque: Picking up on what my colleague just said, if you stopped referring to integration and referred instead to recognizing knowledge systems, how they are learned and what indigenous peoples, groups and bodies put in place, you'd then be able to create spaces where Canadian and indigenous societies could connect. You mustn't view this as an integration, but rather as a recognition of different knowledge systems.

[*English*]

Mr. Gerald Soroka: To follow up on that, have you found some better methodology for recognition and for how we can utilize that better?

[*Translation*]

Mrs. Carole Lévesque: Yes, we've established projects with Quebec Anishinabe and Innu communities. Those projects have had an impact on teaching and on the primary and secondary curriculum, for example, and have concerned the transmission of knowledge to young generations. As I said earlier in my remarks, those projects concern issues that are just as sensitive as homelessness.

We've included some potential solutions in briefs to federal and provincial parliamentary committees. Those solutions would involve bringing together various types of knowledge in order to develop policies that recognize the existence of knowledge systems and do them justice. They also include ways to address those types of knowledge in an indigenous context.

We are obviously in favour of these converging knowledge sets for spaces where it's possible to interact rather than merely see the indigenous world on the one hand and the non-indigenous world on the other. For the benefit of indigenous populations, we need to create meeting spaces, interfaces for addressing common concerns. That requires policies and programs, including health and social services programs. You have to consider indigenous expectations and perspectives.

This is where we're seeing genuine results in Quebec, and we're seeing them in many sectors, including accommodation, housing, the new buildings being developed by the Regroupement des centres d'amitié autochtones du Québec. These are living environments that are restoring indigenous values, principles and knowledge, in addition to making it possible to welcome a population of future indigenous students across the province who will move into those buildings as members of families, in many instances for generations to come. In some cases, precedents have already been established in Quebec, often as a result of the work we've done together.

● (1120)

[*English*]

The Chair: Thank you. That's very good. Thank you for the fulsome answer.

Thank you, Mr. Soroka, for the questions.

Mr. Gerald Soroka: We can't be out of time yet.

The Chair: Six minutes go quickly.

Now it's over to Ms. Bradford for six minutes, please.

Ms. Valerie Bradford (Kitchener South—Hespeler, Lib.): Thank you, Mr. Chair.

Thank you so much to our witnesses who are here with us today in person and virtually. I sincerely hope that we're going to be able to get Madame Tshernish online with us.

First of all, I would like to start with Dr. Lévesque.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): I have a point of order. The translation is reversed.

The Chair: Maybe we can flip around the English and the French channels.

I've paused your time. Could you ask something else so we can make sure that we're on the right translation?

Ms. Valerie Bradford: Hello. Is that better?

Mr. Richard Cannings: We have it; it's all good.

The Chair: Okay, we're good now.

Ms. Valerie Bradford: That's good.

The Chair: Please continue.

Ms. Valerie Bradford: Thank you, Mr. Cannings.

Dr. Lévesque, I am very interested in your work with Dialog, which you founded in 2001, the Indigenous Peoples Research and Knowledge Network, which, I understand, has connected students, researchers and indigenous partners since 2001. That's quite a long history.

What lessons can be drawn from the exchanges the Dialog network has facilitated over more than two decades?

[*Translation*]

Mrs. Carole Lévesque: Thank you for your question.

We're actually seeing results in the examples just cited a moment ago. In our work, and in ongoing joint building efforts, we have managed to show that the integration theme doesn't enable us to achieve the objectives that we share with our non-indigenous colleagues. When we refer to integrating indigenous knowledge in science, we risk trivializing the value and robustness of those knowledge systems. Instead we need to go to something that enables connection and interaction. So it can't just be about integration. From the moment you refer to integration, you downplay the role of knowledge and the entire structure of knowledge systems. By not referring to integration, we've managed to update practices, skills and competencies that otherwise wouldn't have been considered.

When you talk about integrating knowledge and science, you reduce indigenous knowledge to information, to specific data points. That doesn't mean it isn't important; it simply means we're losing sight of the entire social and community system that forms the basis of indigenous knowledge. It means that no consideration is being given to what accompanies that information, whereas we very well know that science isn't just a about data. It's about protocols, methodological procedures, inquiries and competencies that scientists and researchers develop.

In an indigenous context, if you merely integrate information and science, you lose sight of the ways in which knowledge is learned and transmitted. You lose sight of the intergenerational significance of that knowledge. This is how we've made progress and how that progress has had a knock-on effect in many projects and fields.

● (1125)

[*English*]

Ms. Valerie Bradford: Thank you.

I think you've just articulated the challenges of bringing two solitudes together. The scientific method is all based on quantifiable data, and indigenous knowledge is based on lived experience over generations—literally, in-the-field observation and things like that.

I can understand that there probably are challenges and misunderstandings that have arisen over the 20 years that Dialog has been operational. Can you elaborate a little bit more on how you overcome this and make sure that the indigenous knowledge is treated equally and is not overwhelmed by the scientific approach?

[*Translation*]

Mrs. Carole Lévesque: I would say that indigenous knowledge isn't merely qualitative in nature. Some indigenous knowledge is highly standardized and yields results that could be characterized as quantitative. The idea that indigenous knowledge is merely qualitative is a preconceived notion. There are standards and ways of doing things. Science is also highly standardized and codified, but we mustn't lose sight of the fact that science isn't just environmental science, natural science or physical science. It also embraces the social sciences and humanities.

As we address the matter of indigenous knowledge, we exceed the boundaries that we've established in our scientific systems. People in the social sciences don't often work with others in the natural sciences. We at the Dialog network have worked with many disciplines in an attempt to see how they correspond with each other, because indigenous knowledge systems can't be understood as so many separate disciplines. They must be viewed as a way of understanding the world.

By working in an interdisciplinary, even transdisciplinary, manner, we can acquire the necessary perception and lessons to address and define indigenous knowledge systems, which aren't siloed.

[*English*]

Ms. Valerie Bradford: I just wanted to clarify that I do appreciate that the indigenous people also have been very helpful to governments over the years in quantifying endangered species.

The Chair: Thank you.

[*Translation*]

Mr. Blanchette-Joncas, you have the floor for six minutes.

Mr. Maxime Blanchette-Joncas (Rimouski-Neigette—Témiscouata—Les Basques, BQ): Thank you, Mr. Chair.

Good morning to the witnesses who have joined us today.

Mrs. Lévesque, I listened closely to your opening remarks. I want to draw on your extensive experience as an anthropologist to try to demystify things. Many witnesses have appeared before us during this study, and we don't all agree on the same things.

Is there a clear definition of western science?

At what point in human history did science acquire an ethnic or national character?

● (1130)

Mrs. Carole Lévesque: You're raising an extremely complex issue, and I don't think I can give you an answer.

I would say that science has developed over hundreds, even thousands, of years from elements that have constituted the modern sciences. The same is true in the indigenous context.

There isn't one science, but rather many sciences. Science makes it possible to understand social and environmental realities and phenomena in a host of fields. That enables us to create common knowledge. Science operates at the collective level, whereas we previously tended to view it as highly individualistic.

The same is true in an indigenous context: knowledge is kept collectively. When you acquire a piece of information from an individual person, what you get is only a very small part of the knowledge system.

As for the characteristics of science in general, I can't name them for you, except to say that, based on my experience as an anthropologist, there are various sciences and practices, but the idea is always to create knowledge that is validated by peers and placed in a collective context, unlike an opinion. An opinion isn't knowledge; an opinion is an individual point of view. Knowledge, on the other hand, is validated information that, once contextualized, studied and explained, becomes part of a common body of knowledge. And that's where the problem often arises.

So when we want to contact people to elicit their knowledge, they can give each of us information as individuals, but we must understand the system in the same way as we understand science. We must view, as a whole, scientific systems and knowledge systems that have developed in medicine, health and education at the societal level.

Science isn't transmitted by one single person.

Mr. Maxime Blanchette-Joncas: Mrs. Lévesque, I'm going to continue on the matter of how to view it all.

Is there a universal definition of science or indigenous knowledge?

Mrs. Carole Lévesque: No, just as there isn't an exclusively universal definition of scientific knowledge. The social sciences, the humanities, which generate meaning, the physical sciences, the natural sciences and the technological sciences are based on cumulative knowledge and can thus support universal claims. The social sciences, on the other hand, aren't based on cumulative knowledge, but rather explanatory knowledge. They are forms of knowledge that derive from an understanding of societies and their manifestations.

Indigenous knowledge systems have a universal quality in that they are everywhere. The social sciences also have a universal quality in that social sciences are practised differently in Africa, South America and Canada. There are specific characteristics associated with the societal aspect, and that's also true in the indigenous context.

We would like science to be universal—that's one of the claims it makes for itself—but to what extent is science universal, and what scientific disciplines afford us truly universal understanding?

Mr. Maxime Blanchette-Joncas: Mrs. Lévesque, I want to continue with you to be sure I understand.

You say that indigenous knowledge is a way of knowing different from traditional science. As you said, the scientific method has a standardized process.

If there are two different ways of knowing that don't employ the same scientific process, since you say it isn't necessarily applicable, how do we then distinguish true from false?

How do we distinguish beliefs, traditions, opinions and hypotheses from reality, as well as knowledge, which can be validated by peers, by a standardized scientific process?

● (1135)

Mrs. Carole Lévesque: I really like your question. It gives me a chance to repeat that the Dialog network has created spaces where it's possible to come together, and it continues to do so. We don't aim to change science completely, just as we don't aim to change knowledge systems completely, but we can create meeting spaces where we can find common denominators.

Getting back to your question about how to distinguish knowledge from an opinion or belief, you have to see all the work that's being done in the social sciences. We're trained to determine whether we're talking about actual knowledge that has been validated by people, that is to say, knowledge as opposed to opinion.

That's characteristic of the social sciences. Consequently, all I can do is state what I think in my own field.

[*English*]

The Chair: Thank you.

I'm being a little lenient on the time, because we have a witness here, but we do need to stick as close as we can to the six minutes.

Next, we have Mr. Cannings, for the final six minutes.

Mr. Richard Cannings: Thank you, and thank you to all the witnesses for being here today. It's very interesting.

I'm going to start with Chief Lazare.

In your position as chief of Kahnawake, how does your government use indigenous knowledge in its work, and how does it use western or settler science in its work? How does that come together? You've talked about emphasizing the similarities. Can you comment on some practical examples of how that happens?

Chief Jessica Lazare: I will, to the best of my knowledge, because I'm not a scientist, practically.

We have different departments in the Mohawk Council of Kahnawake. A predominant one would be, for example, the environment protection office. The work they do is to protect the lands that we have, unfortunately, been huddled into. They do a lot of work monitoring creeks, soils, waterways and air. They look at this in a natural science way, sending it out to get tested: "What's in the air? What's in here?" At the same time, we're looking at global warming. We're looking at all the different things that have come up around us in society, including cars, trains and boats or ships. As you know, all three pass through our community. We're looking at how that impacts the air quality and the soil, and how the earth cleans itself.

Mother earth has always been able to clean itself. It's always been able to sustain itself and take care of itself. However, with human interaction and human invasion in general, it has a hard time trying to keep up. There is more damage done than the earth can repair. As you know, trees can clean air and soil. The roots.... They're all connected. The teachings of all of that are within the languages and stories. I know that, for some, this is hard to understand. How can you learn something so scientific from a story, from passing it on and telling stories? However, if you really pay attention to the words and to what the root of the story is, you learn why these relationships are so important to one another. If we start cutting down all the trees and just save the roots, the air quality is gone. The soil quality is gone because those trees will end up dying. It is the same thing for plants. In Canada, we have a lot of invasive species that have come onto this land and destroyed the natural ecosystems that work around us.

On top of what KEPO does in its own department, it also works with our consultation committee, which very often—on a weekly basis—gets submissions for consultation in order to check off boxes in different permit applications. Unfortunately, that's all it ends up being. It's someone to talk to. It's just a checked-off box: "Okay, we talked to them and that's it." They're not actually taking in our information, our understanding of the world or our hunting and harvesting practices. All of those are balanced with what we know about the science and the relationships among all the natural beings.

We can't do too much hunting, or else the balance won't be sustainable. There are deer culls that happen. They go hunting for deer because there is an overpopulation. That is another way of trying to sustain balance. There are all these different methodologies in my community, from the offices and the departments I work with in the Mohawk Council of Kahnawake to community members developing programs to revitalize and spread that knowledge, because a lot of it was.... I don't want to say that it was taken from us, because we still have it. However, they tried to suppress a lot of it. Very few people hold the knowledge. Now, from what I'm witnessing, our community members are trying to revitalize that. It's very cultural, but it's also scientific. There's a reason why we did things the way we did them.

Another thing is ceremony. This is probably a strange concept, incorporating ceremony into science. However, this is how we greet the natural world and everything that was given to us by our Creator. All of that is very important. It reminds us that we are just living on this land. It is not ours. These beings are not ours to own. It's not ours to destroy. We have to work together in order to see what we call the “yearly cycle” continue. Those ceremonies are based in language and ways of life, reminding us seasonally what we give thanks for, why we give thanks, what these different medicines are for and what the roles and responsibilities are of the animals, trees, plants and waters. If we have no fish in the water, there's not going to be any clean water. It's those kinds of things.

● (1140)

My Kahnawake people, which is the Mohawk people, have known this since time immemorial. We have known these teachings and carried them on using stories to tell children so that, when they are young, they start to understand. When you tell stories to children, it's a lot more interesting and a lot more engaging for children than having a speech like this. There are different tools and different methodologies that come into play and, of course, we want our children to grow up knowing these things, holding these things, instead of having to teach them later in life, instead of having to teach them when it's a little too late.

Mr. Richard Cannings: Thank you.

The Chair: Thank you.

Thank you, Richard, for allowing the space for that answer. These committee meetings quite often are so quick that we don't get that level of answer.

Thank you for the answer.

Thank you for the space, Richard.

Now we're going, for the next five minutes, to Corey Tochor.

Mr. Corey Tochor (Saskatoon—University, CPC): Thank you, Chair.

Thank you to our witnesses.

Chief Lazare, you spoke about the importance of mother earth and the roles of animals. You had some questions earlier at committee when unfortunately there were members who snickered when we talked about the importance of hunting. Could you highlight some of the hunting stories that elders would share with the next generation to understand the importance of hunting and, within the context of the knowledge, how we interact with mother earth and animals?

Chief Jessica Lazare: Do you want me to just share more on that topic?

Mr. Corey Tochor: Yes, please.

Chief Jessica Lazare: In Kahnawake culture, we have *Kanien'kehá:ka onkwawén:na raotitióhkwa*: “words before all else”. I'm sure you've heard it in different forums. You've heard either chiefs or elders, or even young people who are starting to be able to speak in these public forums, recite these words: *Kanien'kehá:ka onkwawén:na raotitióhkwa*. This translates to “words before all else”; it matters before all else.

Before we begin our days, before we begin meetings, we have to bring our minds as one. We all have to think together. I am trying to translate it in my head. It's very hard to translate. I have three languages in my head. We first give thanks to mother earth. We give thanks for everything she has given us: for giving the land that we walk on; for allowing the plants to grow from her; for having the waters. We give thanks for the waters, for the fish and the waters. We give thanks for the trees, the animals, and all living beings. It goes down to insects. It goes down to the roots. It goes up to the winds that bring the seeds of change and whatnot.

All of this is to say that our roles and responsibilities as humans are to coexist with all of these living beings and that we are not superseding them. We are not paramount. We are equal to all of these different beings. We are equally important.

In my teachings, when it comes to hunting and harvesting, the Creator has given those animals for us to be able to sustain ourselves. When it comes to a hunter seeing a deer or a harvester seeing medicines, the teaching is “don't pick the first one”. For medicines, you know that it's because that might be the last one. You wait until you see a few more so that you know you're not picking the last one. That's a sustainable practice, because we know that if we pick the last one, it's gone. It's the same thing for hunting. We know that it's very hard to hunt. Sometimes it takes hours and sometimes it takes days until that deer presents itself or the moose presents itself, and then you are finally able to harvest that animal to feed your family for sustenance.

You have to understand that there have been a lot of changes to the way that we conduct ourselves. Sometimes others are not hunters and families are not hunters, so there are hunters who go out to hunt for other families. We share those kinds of sustenance. We share those protocols. We share those understandings.

I hope I'm answering your question, because I can go on forever about this.

● (1145)

Mr. Corey Tochor: Well, just to narrow it down, because I know I don't have much time, what would you say to people who snicker at the thought that hunting isn't important for indigenous people in Canada or that the practices that have been handed down for generations could stop under the current government? What would you say to the snickering or to the people who don't understand the importance of hunting to the community and the importance of, as you touched on a bit, the sharing in the community with the harvest? Can you expand a bit on that?

Chief Jessica Lazare: I would say that it's very sad to see that there is a lack of understanding, a lack of willingness to understand a different culture, a different practice, a different world view.

I would say that if you want to learn, we'll take you hunting. If you want to learn, come to our community, and we'll show you what it means to be a community. We'll show you what it means to us to harvest, so that you can fully understand and that snickering can be discontinued.

Mr. Corey Tochor: It's frustrating to me, as a parliamentarian and as a fellow hunter, that our way of life is being challenged, that because we have hunting rifles, it somehow affects crime in downtown Toronto. That seems ridiculous to me. Are there people in your community who also think that connection is false?

Chief Jessica Lazare: Yes, for sure. I do believe that a lot of the things that indigenous peoples do, especially the *Kahnawa'kehró:non*, the people of Kahnawake, seem ridiculous and illegal to the outside. That's another one of the challenges we face—and I'm going to speak for Kahnawake, because I'm not from the other community—and we feel that it's unfair.

Mr. Corey Tochor: Thank you so much.

The Chair: Thank you for the testimony and the questions.

We now go to Mr. Turnbull for five minutes, please.

Mr. Ryan Turnbull (Whitby, Lib.): Thank you to both of the witnesses. I really appreciate the discussion and the space that you're helping us create here.

Chief Lazare, maybe I'll start with you. Right at the end of your opening remarks, you made a comment about listening and the importance of listening. You made a distinction that I'm very fond of, which is listening for the sake of listening rather than for responding. I think you said—

Chief Jessica Lazare: I said "listening to understand".

Mr. Ryan Turnbull: It's listening to understand, which is very different. Do you want to unpack that for members? I think that's really important. It may relate to some of your other testimony today, which is how important it is to bring an open mind and the right sort of attitude. My perspective is that it's a kind of attitude that you bring to learning, but maybe you'd say it differently; I don't know. Could you unpack that a little bit more for us and how important that is?

Chief Jessica Lazare: Yes, for sure. In the different forums that I've worked in and spoken in, I have found that listening to understand opens up a more productive dialogue and one that is more conducive to learning from different perspectives, from speaking with my children to speaking professionally.

When you just listen to respond, it demonstrates that you're listening in a defensive mode, that you're already blocked up and you're not opening yourself up to understanding. You're having a discussion or a forum to engage in and to learn from, and you're only speaking to respond and critique what you're hearing, instead of saying, "Okay, tell me more."

We may have disagreements. We may not understand each other, but the whole point of having a conversation and communicating with each other is to learn what those points of view are. We can agree to disagree; that's fair. That happens at my table. We can agree to disagree. I am the youngest at my table of 12. That honestly gives me a different perspective from that of the oldest or the longest-standing member of my table.

It's good to have that kind of diversity. It's good to have those kinds of dialogues and discussions, because you bring out different perspectives to one common goal. You bring out all of these different things that you may not have considered. There are a lot of things that I may not have considered. For example, you could say, "This is what I understand about this. Okay, do you know what? Maybe we can bring this in too." That's how you learn. That's how you progress, and that's how you can be conducive to resolving issues.

● (1150)

Mr. Ryan Turnbull: Thank you.

Maybe just as a quick follow-up to that, I think what I've heard you say—or how I've taken it—is that, when you are listening to understand, you're open and willing to change your perspective and see things from a new perspective.

Chief Jessica Lazare: I would say that you evolve your perspective.

Mr. Ryan Turnbull: Yes.

Chief Jessica Lazare: It's good to have your convictions, but at the same time, it's good to evolve and to change, as we are natural beings.

Mr. Ryan Turnbull: I appreciate that.

Ms. Lévesque, maybe I'll go to you to build on this comment. You mentioned the importance of listening, and you also talked about creating spaces for interaction or intersection and just how important that is. You also sort of critiqued the idea of integration, which I thought was very insightful.

I want to ask you what barriers or challenges you might foresee in the federal government's trying to create those kinds of spaces. I think you have some experience over the 20-something years that you've been doing this. Could you relay some of what might be the barriers or challenges to creating those kinds of spaces? Could you help us?

The Chair: You have about one minute.

Mr. Ryan Turnbull: I think she may be frozen.

The Chair: I think we've lost Ms. Lévesque.

Mr. Ryan Turnbull: That's too bad. I was really looking forward to her response.

The Chair: Maybe we can get the question in writing over to her in order to try to include it in the testimony today.

We have about 20 seconds left, if you have another question.

Mr. Ryan Turnbull: Maybe I'll go back to you, Chief Lazare.

In terms of your ways of knowing and traditional knowledge, what signs do you see of climate change that are deeply concerning to you?

The Chair: Answer very briefly, if you don't mind, please.

Mr. Ryan Turnbull: Maybe just list one or two.

Chief Jessica Lazare: There are a lot right now that we're seeing. I can't speak specifically on the climate change things right now because I'm put on the spot. I'm so sorry. I can probably answer this in writing.

The Chair: Let's do that. Let's circle back. Unfortunately, time is not on our side for that question. Thank you for trying.

Mr. Blanchette-Joncas, you have two and a half minutes, please.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you, Mr. Chair.

Mrs. Lévesque, earlier you discussed the importance of bridges of understanding.

I'd like you to explain something to us. How can the federal government make decisions involving the experiences of indigenous communities if the ways of knowing are different? You said that assessment is done differently. I'd like to know if the communities have had experiences that differ from what the scientific data show. In other words, are there any contradictions? How do you go about integrating it all and distinguishing what's good from what's less good?

That's the question. How can we say whether the scientific method applies to indigenous knowledge?

Mrs. Carole Lévesque: As I briefly mentioned earlier, the idea isn't to reject science or indigenous knowledge, but rather to give each knowledge system an equal chance. That can be achieved by working together to build knowledge and through working meetings, for example. The idea is to find connections between science and indigenous knowledge.

Of course, they may not necessarily point in the same direction. However, if a team is convinced it's important to find solutions together, then it may possibly come up with two solutions, one of which will come from science and the other from indigenous knowledge systems. Those two solutions can coexist.

So the idea isn't to pit science and indigenous knowledge against each other but rather to determine mechanisms whereby they can come together. There has to be an exchange between scientists who are open to other ways of understanding and indigenous knowledge-keepers. The idea isn't to isolate two worlds and to pit them against each other and polarize them but rather to find meeting spaces and work within those spaces. They mustn't provide responses that are predetermined or written in advance. We have to find ways to advance further in our respective knowledge systems.

● (1155)

Mr. Maxime Blanchette-Joncas: I see.

[*English*]

The Chair: Mr. Cannings, you have the last two and a half minutes, please.

Mr. Richard Cannings: Thank you.

I'd like to continue with Ms. Lévesque.

You made a very forceful and, I think, proper distinction around the word “integration”. We don't want to talk of integrating indigenous knowledge with science. What this study is about is integrating indigenous knowledge into our policy decisions—just as I, as a scientist, would prefer to see more science integrated into our policy-making frameworks.

I'm just wondering if you could comment on that, on how we could use indigenous knowledge more in our policy-making, and how that would work alongside western, or settler, science.

[*Translation*]

Mrs. Carole Lévesque: Once again, this idea of integrating may have a broader meaning in the context of this House of Commons committee. The idea isn't to start off with science as the main dish and to add an ingredient that comes from indigenous sciences, indigenous knowledge and indigenous knowledge systems. The idea instead is to see how we can find potential responses in both systems and how we can make them coexist rather than integrate them.

What we've done in previous decades by wanting to integrate knowledge hasn't yielded very convincing results because the basis was scientific and not very open to other kinds of information. By establishing a slightly more equitable foundation, we can draw on practices and ways of doing things. Science isn't just about data; it's also about practices and ways of doing things that come together, sometimes more often than we think. In fact, when you adhere to the idea of integrating, you lose sight of the very essence of indigenous knowledge systems, which could suggest other ways of building knowledge or experience. Ms. Lazare clearly established that.

However, if we aren't open to those kinds of practices, we'll lose sight of the evidence that would enable us, for example, to develop more effective environmental, health and education policies.

[*English*]

The Chair: Thank you.

You always have more to say than we have time on the clock, but that's the nature of what we are doing here, unfortunately.

Thank you for your contributions today, Dr. Lévesque and Chief Lazare. It was a really good discussion, and I know our analysts will be putting some of this information forward to us.

We're still working in the background trying to recover some time with Marjolaine Tshernish. Possibly, in the second part of the meeting, we might be able to get her testimony. If not, we'll keep working on that, so that we can get as broad a perspective as we can.

Mr. Ryan Turnbull: Chair, could I make a comment?

● (1200)

The Chair: Do you have a point of order?

Mr. Ryan Turnbull: It's not really a point of order. I just want to make a very small comment.

I had asked Ms. Lévesque a question, which I felt would be really great to get an answer to. I know she had a technical difficulty at that moment. It was nobody's fault. I was just wondering if I could get—

The Chair: That's my next line.

Mr. Ryan Turnbull: Is it? My apologies.

The Chair: We didn't get all the answers. We ran out of time on some, and we had a few technical difficulties, so, please, do submit any answers to the clerk.

If you were off-line and missed a question, we'll try to make sure the question gets to you. The clerk will reach out and get the question to you, so that we can include that in the testimony this morning. Such is the nature of Zoom sometimes.

Thank you to all of our witnesses.

We are going to suspend briefly, and then continue with the second part of our meeting.

● (1200)

_____(Pause)_____

● (1205)

The Chair: We still have some technical issues in the background, but our two witnesses who are here have had the sound checks done, and we're ready to go.

Pursuant to Standing Order 108(3)(i), and the motion adopted by the committee on Monday, September 18, 2023, the committee resumes its study on the integration of indigenous traditional knowledge and science in government policy development.

It's now my pleasure to welcome Dr. Nancy Turner, distinguished professor emerita, to our committee today, as well as Dr. Vicki Kelly, associate professor at Simon Fraser University. Both are with us via video conference in a part of the country where it would be great for us to be visiting you, and not vice versa.

You each have five minutes for your opening statements.

We'll start with Dr. Turner. Go ahead with your five-minute presentation, please.

Dr. Nancy Turner (Distinguished Professor Emerita, University of Victoria, As an Individual): Thank you, Mr. Chair, and thank you to everyone for the technical help we've received.

I acknowledge, with respect, the people and lands of the Snuneymuxw First Nation, where I am at present, and the indigenous peoples across Canada and beyond.

I want to recognize, with deep gratitude, the many indigenous knowledge-keepers who have generously shared their knowledge and wisdom with me over the past 50-plus years.

I am an ethnobotanist and ethnoecologist, trained in western biological sciences, but also in anthropology and geography. I have worked in many indigenous communities and have come to appreciate the importance of language in communicating knowledge—

The Chair: I'm sorry. I have to suspend for two seconds. We do not have interpretation services on.

Could you start from the beginning? We'll see if we can pick up on the interpretation services.

I've paused the time here.

Dr. Nancy Turner: Okay. Thank you, Mr. Chair.

I acknowledge, with respect, the people—

[*Translation*]

Mr. Maxime Blanchette-Joncas: Pardon me, Mr. Chair.

[*English*]

The Chair: I'm sorry. We don't have interpretation services, so I have to interrupt again.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Mr. Chair, the interpreter tells us that the sound quality is not good and that interpretation is therefore impossible.

[*English*]

The Chair: Do we have a House-approved headset?

Dr. Nancy Turner: Yes, my husband went and bought it.

The Chair: Oh no. Okay.

We might have to go to you second, then, Dr. Turner. I'm sorry. Maybe we could have technical support work to see if we can improve the quality of sound. It isn't enough for the interpreters to do their job.

We can move over to Dr. Kelly while we try to resolve yours. I'm sorry to interrupt, but we do need to have presentations in both official languages to continue.

We'll go over to Dr. Kelly for five minutes, please.

Dr. Vicki Kelly (Associate Professor, Simon Fraser University, As an Individual): *Aanii*. *Boozhoo*.

Thank you for the invitation and honour to be here with you today. I am speaking from the unceded, traditional ancestral territories of the Coast Salish Peoples.

I am Anishinabe Métis from northwestern Ontario. As the director of the indigenous research institute, I have been working with the SFU research and ethics offices to create a series of dialogues on indigenous knowledges and ethics to create a new ground for the work of the research services and the research community at SFU. As an indigenous scholar, I work in the areas of indigenous ecological health and art education.

First, I would like to acknowledge that this conversation is taking place within the circle of world views, and is ultimately about creating the capacity to respectfully honour the tacit infrastructures of their profound diversity. We are endeavouring to collectively honour the diverse ways of coming to know the world around us. This is an act of resistance to the dominant paradigm of universalism, or the dominance of one world view through globalization and colonization. It is the capacity of living well within the circle of knowledges, or two-eyed seeing, as a pathway to many-eyed seeing that we are longing to develop.

Second, science is the act of knowing or coming to know, and the creation of a body of knowledge within a system or world view. It is attending deeply to the world such that we read the patterns and become wisely aware, enabling us to act ecologically respectful of all our relations. What kind of relative do we want to be?

Third, a discipline is the object of knowledge or instruction and learning about a field of knowledge. What is the pedagogical pathway of wholeness that our ancestors are inviting us into? What kinds of ancestors do we want to be?

Lastly, policy is a way of managing and the study of the practice of government. It creates the structures of governance, or protocols for the processes that guide or govern life in practice, as it unfolds.

What are our responsibilities to the next generations?

My understanding is that this work is about trans-systemic understandings of science and an interdisciplinary or holistic engagement with coming to know about the world, ultimately honouring kinship and the governance of being a good relative to our human and more-than-human relatives, for life's sake.

My vision involves five principles or protocols: reverence, to walk with humility and reverence for life; respect, to respect all ways of being and the right to be and become; responsibility, to walk in a good way, honouring our responsibility as a member within the family of Creation; reciprocity, to take good care of and offer back in gratitude for what we have been given; relationality, to live relationally and ethically in relation to all our relations.

Part of this vision is to invite us to sit in a circle as a human family, and in the centre of our care and concern are our relatives and mother earth. Our social and ecological crises are inviting us to turn into the circle and to focus on the right of being of our human and more-than-human relatives and mother earth.

Most importantly, this is the third element or strand in the braid, and the most important part of the act of braiding sweetgrass, our humble offering. It is honouring the personhood of nature and the rights of nature by braiding indigenous and western sciences with the being of nature respectfully, responsibly, in reciprocity with ethical relationality. It is gathering in circles of care around the third strand in the braid—the well-being of nature and mother earth. This should be the governing principle of policy moving forward, for what is Canada without the being of the land?

● (1210)

Thank you. *Chi-meegwetch*.

The Chair: Thank you for your testimony.

I'm going to welcome back Dr. Tshernish. You've changed locations. Maybe we can have your five-minute testimony while we work on the other technical issues.

We can't hear you. Turn off mute.

[*Translation*]

Ms. Marjolaine Tshernish: Okay. Pardon me.

Can you hear me now?

[*English*]

The Chair: I think that's good.

[*Translation*]

Ms. Marjolaine Tshernish: Good afternoon and thank you for inviting me once again to this meeting.

My name is Marjolaine Tshernish, and I am an Innu from the community of Maliotenam. I work for and with my nation. I also work with elderly persons and various other groups. We support schools, promote our culture and conduct activities to protect our future as well as our traditional knowledge and language. I speak the Innu language and practise Innu culture.

In the context of this study on the integration of traditional knowledge in government policies, we really need to question what the objectives of this initiative are and understand the objectives we need to achieve.

As you know, there are many nations across Canada. We have two language families and we have cultural diversity. Our cultures are different, our beliefs are different, and our ways of thinking are as well. However, many aspects of our cultures are very similar. We attach importance to the stories of our ancestors, our legends, the land and everything that surrounds us in life.

As we can see, the hierarchy of first nations values differs from that of the dominant society's values. In my organization, I work with Innu and non-indigenous persons, and I can see they follow different pathways. Our ways of living are truly different.

The people of my generation have a major responsibility. We are the bearers of our traditions. We must ensure that we pass on our traditional knowledge and language. We are also under considerable pressure to be educated, to earn diplomas and to meet the expectations of the dominant society.

Traditional knowledge is important, as are our elders as well. Their memory is very important, and that must always be taken into account. I know that the traditional knowledge of first nations elders affords major benefits in certain government departments, but I'm not sure traditional knowledge will be integrated in government policies in others.

For example, everything pertaining to sacred practices is part of our traditional knowledge. The way we think is very different from that of other cultures. Our language, Innu-aimun, comes from the land. We use it on the land, and we use it here, on our reserves, in our communities. The translation of Innu words is very complex because of their meaning.

Consequently, that knowledge and those beliefs often aren't consistent with the way things are done in the political system, a system that doesn't suit us.

● (1215)

That political system was imposed on us by band councils, a situation that conflicted with our values and beliefs. We can see that the population hasn't embraced the change, and this has caused conflict between our values and those new systems. Our population seems lost as a result—

● (1220)

[*English*]

The Chair: Thank you. I'm sorry to have to cut you short, but we are over time.

We're going to try to go to Dr. Turner. The technical people have made some adjustments.

Dr. Turner, could you try to do your opening? We'll see whether translation is able to pick up what you're saying.

Dr. Nancy Turner: Thank you, Mr. Chair, and thank you for the technical help I've received.

I have listened with appreciation to the other witnesses as well.

I acknowledge with respect the people and lands of the Snuneymuxw First Nation, where I am at present, and indigenous peoples across Canada and beyond. I want to recognize with deep gratitude the many indigenous knowledge-keepers who have generously shared their knowledge and wisdom with me over the last 50-plus years.

I am an ethnobotanist and ethnoecologist trained in western biological sciences but also in anthropology and geography. I have worked in many indigenous communities and have come to appreciate the importance of language and communicating knowledge, in particular about plants and environments. I also recognize the importance of traditional food, cultural materials, medicines, narratives and ceremony based on relationships with other species and their habitats. I have been out on the lands and waters with my indigenous colleagues and teachers, and I have been able to observe first-hand the deep historical connections to species and locales of people's homelands.

It's important to recognize, as I know you do, that cultural groups living in their own homelands have their own particular knowledge grounded in place, often reflecting residency over thousands of years. The habitats and places within their territories—the wetlands, shorelines, mountain slopes, forests, lakes, rivers, trails, camping places and healing sites—all have special meaning, often with their own place names, stories, history and proprietorship.

I've been learning for years and years about the importance of plants and other life for first peoples, but it took a very long time before I began to realize just how deep the relationships have been between indigenous peoples and other species and the sophistication and complexity of their knowledge and caretaking practices relating to other species and their habitats, as well as how much communication, exchange and adaptation of knowledge have occurred across nations over time.

For example, the clam gardens, now recognized ancient beach features up and down the northwest coast, were unrecognized as anthropogenic features by the scientists who first described them. It was only after Kwaxsistalla Wathl'thla, clan chief Adam Dick of the Dzawada'enux Kwakwaka'wakw community, explained what they were and how they were created and maintained over generations that they came to be identified as such.

Traditional ecological knowledge systems of indigenous peoples are often compared with western scientific knowledge, but in fact they extend into many other realms, from language to education and governance, and they almost invariably embody a world view of stewardship, respect, reciprocity and relationality with other species and with the earth. They've supported the development of a range of traditional land and resource caretaking approaches that have included careful use of landscape burning, selective harvesting, replanting propagules and many other techniques, learned, shared and adapted over time and space.

With time constraints, I will skip over the examples I have of programs that I've worked on—the scientific panel for sustainable forest practices in Clayoquot Sound; the Nuxalk food and nutrition program in Bella Coola; and the Reconciling Ways of Knowing online forum—which have attempted to use both western science and indigenous knowledge equally in developing solutions to particular problems.

The commitments that Canada has made in ratifying, adopting and creating a draft action plan based on the UN Declaration on the Rights of Indigenous Peoples and the calls to action of the Truth and Reconciliation Commission provide an obvious and appropriate starting point in your work. With full participation and leadership from indigenous knowledge-keepers, educational programs and courses for all government members can be developed to inform them about indigenous peoples' history and languages and about the underlying principles of indigenous cultures and environmental knowledge systems and how these differ from and/or connect with scientific beliefs or understandings.

● (1225)

At least some parts of these educational programs should take place on the ground as participatory learning and in consultation with the indigenous nations affected by the policies being developed.

The Chair: Thank you.

I'm going to have to stop there. You can also give us testimony in writing or as part of the answers to questions, which we will go into right away.

Thank you to the technical support people and to the translators for being able to get us the testimony today.

We'll go over to Mr. Lobb for six minutes, please.

Mr. Ben Lobb (Huron—Bruce, CPC): Thanks very much, Mr. Chair.

I'd like to thank everybody for their presentations today.

My first question is for Ms. Tshernish.

A lot of the discussion in the last number of meetings has been specifically on integrating into the environment. I think there's been a lot discussion about the natural environment. I was wondering, though, if there are other areas where government should look at integrating or weaving in different departments where there might be some benefit, maybe in housing or in health care. Just looking around some of our main streets in the downtown core, there are a lot of issues right now. I'm wondering if maybe some of the solutions could be in some of the traditional knowledge.

Do you have any thoughts on that?

[*Translation*]

Ms. Marjolaine Tshernish: I'm sorry, but I didn't understand the question. Would the interpreter please summarize the question because the point of it wasn't clear in the translation?

[*English*]

The Chair: I have paused. Maybe we could ask it again in a different way.

Mr. Ben Lobb: Sure. I can try that again.

It wouldn't be the first time I've been accused of saying a whole bunch of things that didn't come through clearly, I guess.

What I would ask plainly is, are there teachings other than in the natural environment? There's been a lot of discussion about the natural environment. Are there other teachings and cultural practices that we should look at weaving into government policy, such as on housing, the shortage of housing or some of the other societal ills, where we can maybe learn from our first peoples about what would make a lot of sense in our government policies?

[*Translation*]

Ms. Marjolaine Tshernish: I know the elders and guardians of the land issue a lot of alerts. They are the eyes of the first nations, which have now become sedentary. They observe the impact of climate change when they're on the land and provide a lot of information to environmentalists and biologists. Elders have also been issuing warnings about the changes they see for many decades now.

As regards policies, the answer is yes, especially on economic and trade issues. It's important to consume responsibly.

When we hunt caribou, we stick to the number necessary to support our population. The caribou was used in many ways, particularly in the remedies used in traditional first nations medicine. We also used parts of the animal to create instruments like the *teueikan*. Certain parts of the animal were used to feed us, while others were used to make tools and clothing. The caribou has enabled us to survive for millennia. Consequently, nothing is ever wasted.

Now we're seeing excess consumption. We aren't husbanding our natural resources and there's a lot of waste. We aren't living symbiotically with the environment by respecting it. We put it in second place, subordinating it to human beings. However, these are living beings as well, and I believe we should attach much greater importance to the earth that feeds us and guarantees our survival and that of our wildlife. I therefore believe that our way of viewing the world should be taken into consideration.

I should also mention the way our elders are treated. Our elders are very important to us. They transmit their memory to us, and I think we should be inspired by what we have done, by our values and our principles. That could be helpful when policies are drafted or amended.

Respect is another of our fundamental values, in many ways. There is respect for differences, for example. That should be reflected in the policies we adopt. There is also respect for the beliefs and principles of groups, for the hierarchy of values, which is different, and for the approach they take. All that is based on historical context and our language, which crystallizes our thinking.

● (1230)

[*English*]

The Chair: Thank you. That was a terrific question that we could have gone on with a lot longer, but you've given us some great insights into looking at things differently.

Dr. Jaczek, you have six minutes, please.

Hon. Helena Jaczek (Markham—Stouffville, Lib.): Thank you, Chair.

To all our witnesses, thank you for your testimony. As you know, what we are trying to do on this committee is study how best to integrate indigenous traditional knowledge and science into government policy development. I would really like to hear from you some practical suggestions as to how we might do this. Government policy can be initiated, as an example, through federal government agencies. I'm thinking about research dollars and things like CIHR, NSERC, etc.

What would you say about some of those government agencies being required to look for indigenous collaboration or consultation in some fashion in granting those research dollars? I just throw that one out, but do you have any suggestions?

Perhaps, Dr. Turner, we could start with you.

● (1235)

Dr. Nancy Turner: Thank you very much for that question. I think it's a really important one.

One of the points I was planning to make in my talk was to note that there's often a major funding disparity between western scientists, academics, and their students and indigenous knowledge-keepers and those indigenous youth and others who are interested in learning about their lands. Many elders in first nations communities, even some of the most knowledgeable, live below the poverty line and need to rely on others to take them out on the land. They don't necessarily have the same level of equipment, travel grants or salaries that are needed to get out.

Therefore, I think addressing this deficit for indigenous peoples and communities should be a major priority. That can be accomplished through the federal granting agencies, as you've mentioned, or through other means. Making sure that indigenous knowledge-keepers have the same financial backing that western academics and scientists have would be really important.

Hon. Helena Jaczek: Thank you so much.

Dr. Kelly, to get back to what Mr. Lobb was asking, could you perhaps give us some examples from your experience as to how weaving indigenous knowledge into issues and problems that you've seen through your career has perhaps assisted in some areas other than the environmental issues, going beyond into health, homelessness, drug use or whatever comes to mind? Could you give us some examples of where it has been very beneficial?

Dr. Vicki Kelly: Yes. Thank you very much for your question.

What I was trying to allude to in what I was saying was that in the work with the research offices, for example, or when I'm teaching my students in all these programs, whether it be health or environmental or indigenous education, what I'm encountering is young people who, from children, have been discontent with the world view of how we are attending to medicine, how we are attending to education and how we're attending to environmental issues. What they tell me is that they are grateful to encounter indigenous understandings. They're grateful for the world view, for another way of looking at the world and how that implicates or transforms the way they look at the field they have chosen to work in, whether that's health or education or land use or whatever their issue is. They're grateful. One of my students said this to me: “You asked us what kind of ancestor we want to be and how we are carrying on the legacy. My 15-year-old son asked me the same question.”

How do we help in creating this capacity so that we all have a greater understanding of those understandings in our daily lives? They implicate how we act in relation to that which we're working with. It happens in medicine. I worked in hospitals in Europe, and as was already presented by one of your other witnesses, they went from homeopathic to allopathic. That was all on the table when we were looking at well-being and healing.

It's the same in education. What's a holistic, inclusive way of understanding the world that then implicates education? The deficit model, respectfully, based on our scientific understandings, is causing great harm to children.

● (1240)

Hon. Helena Jaczek: In other words, quality of life is just as important, perhaps, as physical longevity or some measures that we conventionally use, if I could paraphrase what you're saying.

Dr. Vicki Kelly: I think the teachings of indigenous peoples are relevant to all that we do today.

The Chair: That's great testimony.

Thank you for the questions as well.

It's wonderful to have the three of you here with us today.

We'll go over to Monsieur Blanchette-Joncas for six minutes, please.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you, Mr. Chair.

Good afternoon to the witnesses who have joined us for the second hour of this study.

My questions are for you, Ms. Tshernish. First, I want to thank you for your commitment and for what you do to promote the Innu language and culture. That's very important. You are entitled to your own identity. From a cultural standpoint, that's part of who you are, your community and your history.

Today I would like you to help us sort out this integration of indigenous knowledge. We've already devoted several meetings to the subject. You mentioned beliefs and traditions in your remarks. With regard to science, as you know, a scientific method has been developed. It's not brand new. I understand that indigenous communities have various experiences that can enhance science.

With regard to indigenous experiences, would you please explain to us how you isolate traditions and beliefs, which are always based on truth or which lead to certain experiences, from the usual scientific process we're familiar with?

How do you combine the two? How do you enhance them so that's positive for everyone?

Ms. Marjolaine Tshernish: Going back to the way our groups work, we've noticed that Innu and non-indigenous employees start and finish at the same place but get there by different paths. The way to conduct a project among non-indigenous people is clearly defined. There are steps that must be observed. Among the first nations, some of those steps occur somewhat later in the process. Sometimes a step is completed twice, but a little further on. You have to understand why the first nations take that step a little further on.

Non-indigenous people ultimately understand that the first nations' process is much more logical. However, they don't follow that reasoning to the point of understanding why the same step occurred twice in the process, for example.

There are also significant differences in the value hierarchy. For example, family is more important than work among first nations. Here some non-indigenous employers understand that there are differences between the value hierarchies of Innu and non-indigenous employees, and they therefore adapt their policies based on those differences.

Mr. Maxime Blanchette-Joncas: Ms. Tshernish, as you said earlier, there are many indigenous communities in Quebec and Canada. Not all of them have had the same experiences, the same history or the same language. Consequently, they have different traditions and beliefs. Scientifically speaking, they may have had experiences that could enhance science.

However, I imagine there are differences in indigenous knowledge. You don't all think the same way; you are different. So who's telling the truth? How do you determine priorities or know what works?

I understand that you have your own methods, but we'd like to know how to integrate indigenous experiences with science now. We want to know where to draw the line. We want to know what you adopt and what you don't adopt, what works and what doesn't.

I'd like you to help us sort that out today.

● (1245)

Ms. Marjolaine Tshernish: You would have to work with groups, with first nations organizations, and invite elders to round tables and discussion tables.

There are similarities between us; we have similar pasts. We have adapted to the geographic situation we were exposed to on the land. Farther to the north, people wear seal skin clothing because it's warmer. A little farther south, they use caribou hide. There are similarities, but differences as well. Some rituals differ from one nation to the next. I, Marjolaine Tshernish, won't be resolving this issue today. You really have to sit down and work with many groups and diverse nations so we too can understand your objectives for integrating traditional knowledge in your policies.

[*English*]

The Chair: That's great. Thank you.

It's a very difficult subject to unpack. Thank you for doing that for us.

Next, we have Mr. Cannings, for six minutes, please.

Mr. Richard Cannings: Thank you, and thank you all for being here today.

I'm going to turn to Dr. Turner. I want to get on the record what a pleasure it is to see you here today, and what an honour.

I want to say a few things about your work, and how important it's been to me and others. You have the Order of Canada, just so everybody knows. We all respect that. You're a true pioneer at that intersection between western science and indigenous knowledge, so thank you. *Lim'limpt*, as we say in the Nsyilxcn language, for all of your books, which I've used so often over the last 50 years.

You touched on a few examples of your work where indigenous knowledge was used, or was attempted to be used, in policy decisions. Could you use the Clayoquot process to talk about your experience in that regard?

Dr. Nancy Turner: Thank you for your kind words, Richard. It's very good to see you, as well.

In the early 1990s, there was a lot of disruption and concern by many people over the way forestry was being practised in the Clayoquot Sound region on the west coast of Vancouver Island. The government of the day convened a panel—I was privileged to be a member of it—composed of Nuu-chah-nulth knowledge-keepers and scientists of various background experiences to come up with recommendations about how forest practices should be undertaken in the region.

Dr. Richard Atleo Umeek was the co-chair of the panel, along with a wildlife biologist. He is the author of two books. One is called *Principles of Tsawalk*.*Tsawalk* means "one".

The first thing we did, following Nuu-chah-nulth protocol, was that we sat around the table, introduced ourselves, and developed a series of guiding principles, ways that we would mutually agree to. That was the fundamental background to the work we were doing. The first principle was something to the effect of *hishuk ish tsawalk*, which means "everything is one". It's the recognition of the interrelationships among all beings that the scientists, Nuu-chah-nulth elders, and specialists agreed to.

Out of that work, over two or three years, came a series of recommendations. I would recommend that your committee actually get a hold of those reports and have a look at them. "Report 3: first nations' perspectives relating to forest practices standards in Clayoquot Sound" has a lot of good advice. Those reports would provide a lot of good information and advice, I think.

● (1250)

Mr. Richard Cannings: You also mentioned the importance of language.

I'm wondering whether you could comment on the capacity of many first nations to provide this indigenous knowledge when, as you know, that knowledge is now contained in so few people in their nations. That's certainly the case in the Okanagan Nation.

I'm wondering whether you could comment on the importance of language.

Dr. Nancy Turner: That is such a good point.

As all of you know, indigenous languages were suppressed during the period of residential schools—over a hundred years or more. Students were actually beaten sometimes for uttering words in their own language. I've talked to people who had that happen to them, so I know what happened to people's languages.

Fortunately, there are individuals in almost all communities or in related communities—I call them "cultural refugia"—who, for one reason or another, managed to retain their language. They still, today, hold that language and are able to pass it along. That is the planting of the seed for language revitalization, which is occurring in many places. Dr. Jeannette Armstrong, who served as a committee member for you, is one of those cultural refugia. I worked with her parents long ago. I know many others who are now involved in restoring and revitalizing all of those diverse languages. I'm very encouraged by what's happening there.

Mr. Richard Cannings: I have 30 seconds. I'll just limit it to this.

I think you mentioned another example that you might want to quickly dive into: a group working on this exact problem of bringing western science and indigenous knowledge together.

Dr. Nancy Turner: Yes. My friend Dr. Harriet Kuhnlein, who is a nutritionist and the founder of the centre for indigenous peoples' nutrition and environment at McGill University, started, together with Nuxalk Nation leaders, a program back in the eighties called the Nuxalk food and nutrition program, which looked at dietary change and its impacts on health in the Nuxalk community at Bella Coola. I was part of that project and able to witness first-hand the respectful relationship between the academic scholars, including Dr. Kuhnlein and others, and the indigenous knowledge-keepers who were sharing that knowledge.

The Chair: Thank you.

Dr. Nancy Turner: There are three books on the FAO website—

The Chair: I'm sorry. I wish we had more time.

As you speak, I'm thinking of Sheila Watt-Cloutier and her work, as well, around traditional country food, the contamination of that food and the impact on indigenous communities. *The Right to Be Cold* was a fantastic book on that.

Unfortunately, we're going to have to call time. We don't have time to go around with quick questions. However, because of some technical difficulties, we were as lenient as we could be on time. Also, the quality of the answers we were getting was tremendous.

Thank you all for being here, Dr. Nancy Turner, Dr. Vicki Kelly and Marjolaine Tshernish, and for the extra work of even changing locations to get technical support working with us.

Also, thank you to the interpreters for allowing some leeway, in terms of the quality of sound we were working with today.

We will be meeting again on Tuesday, February 13, to continue the study. At the end of the meeting on February 13, so we can get a full two hours in, I'd like to extend by 15 to 30 minutes to look at the travel submission for the May break week being prepared by the clerk right now. Hopefully, we can deal with that travel budget so we can get it in under the deadline of February 16.

Apart from that, I think we'd look for an adjournment.

Thank you again to the witnesses.

Thank you to the members for the tremendous depth of their questions today.

Can we adjourn?

Some hon. members: Agreed.

The Chair: No one is fighting me on that one.

Thank you very much.