



HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

44th PARLIAMENT, 1st SESSION

Standing Committee on Science and Research

EVIDENCE

NUMBER 021

Monday, October 31, 2022

Chair: The Honourable Kirsty Duncan



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• (1830)

[English]

The Chair (Hon. Kirsty Duncan (Etobicoke North, Lib.)): I call this meeting to order.

[Translation]

Welcome to the 21st meeting of the Standing Committee on Science and Research.

[English]

Today's meeting is taking place in a hybrid format, pursuant to the House order of June 23, 2022. Members are attending in person in the room and remotely using the Zoom application.

Pursuant to Standing Order 108(3)(i) and the motion adopted by the committee on Thursday, June 16, 2022, we are meeting on the study of research and scientific publication in French.

[Translation]

To ensure an orderly meeting, I would like to outline a few rules for the witnesses and members. Before speaking, please wait until I recognize you by name. If you are on the videoconference, please click on the microphone icon to unmute yourself. Please mute your mic when you are not speaking. For interpretation, those participating through Zoom have the choice, at the bottom of their screen, between three channels: floor, English or French. Members attending in person in the room can use their headset after selecting the channel desired. A reminder that all comments by members and witnesses should be addressed through the chair.

[English]

Members in the room, if you wish to speak, please raise your hand. Members on Zoom, please use the “raise hand” function. The clerk and I will manage the speaking order as best we can. We appreciate your patience and understanding in this regard.

[Translation]

I would now like to welcome our witnesses.

[English]

Colleagues, it's my honour to announce our witnesses today. We're very glad they have joined us, especially tonight.

Many of you will have children, and it's a busy night. Happy Halloween, all.

[Translation]

From Consortium Érudit we welcome Tanja Niemann, Executive Director. From Université du Québec en Outaouais, we welcome Dr. Adel El Zaïm, Vice-President of Research, Creation, Partnership and Internationalisation.

[English]

You will have five minutes for your opening statement. At the four and a half minute mark, I will hold up this card. It will let you know that you have 30 seconds left. We aim to be fair, so you'll have 30 seconds.

With that, I would like to welcome Madame Niemann.

The floor is yours. Welcome. We're looking forward to hearing from you.

[Translation]

Mr. Maxime Blanchette-Joncas (Rimouski-Neigette—Témiscouata—Les Basques, BQ): Madam Chair, I have a question.

[English]

The Chair: I hear Mr. Blanchette-Joncas.

[Translation]

Mr. Maxime Blanchette-Joncas: Good evening, Madam Chair.

Can you confirm that the tests have been successfully completed for all the witnesses?

[English]

The Chair: Thank you, Mr. Blanchette-Joncas. I will ask our excellent clerk.

[Translation]

The Clerk of the Committee (Keelan Buck): Yes, Mr. Blanchette-Joncas, I can confirm that all the tests were conducted today or last week, and they were all successful.

[English]

The Chair: Thank you so much, Mr. Clerk.

Thank you, Mr. Blanchette-Joncas.

I also see a hand up from Mr. Lauzon.

Mr. Lauzon, do you have a question? Mr. Lauzon...?

I think, Mr. Clerk, we may have lost Mr. Lauzon.

• (1835)

Ms. Lena Metlege Diab (Halifax West, Lib.): His hand was up from before, Madam Chair. It wasn't from now.

The Chair: Okay, thank you.

If we could start, then, we look forward to hearing from Madame Niemann.

The floor is yours.

[*Translation*]

Ms. Tanja Niemann (Executive Director, Consortium Érudit): Thank you very much, Madam Chair.

Good evening, members of the committee. Thank you for having me. The team and the members of Consortium Érudit join me in saying that we are honoured to testify as part of this important study on research and publication in French. From the outset I would like to point out three things to the committee.

First, know that Canada has in Érudit a jewel in the digital delivery of knowledge in human and social sciences in French, as well as in English. The founding members, Université de Montréal, Université du Québec à Montréal and Université Laval, have been investing in Consortium Érudit for nearly 25 years. Other major investments come from the Government of Quebec and then the Government of Canada through two agencies, the Canada Foundation for Innovation and the Conseil de recherches en sciences humaines. Through this public funding and a capacity to bring together players from the research community, including university libraries in Canada and abroad, Érudit has become a great ship with wind in its sails. It is a success story that needs to be acknowledged. The project was born in Quebec and today it is a great Canadian success.

If you are looking for a digital library, erudit.org has an exceptional offering, disseminating more than 140,000 articles and collaborating with more than 200 Canadian scientific journals in disciplines as diverse as criminology, geography, visual arts, history or health sciences. Erudit.org is a digital infrastructure combining cutting edge technology and human knowledge. In the vast majority of cases, the content is distributed at no cost to the reader and is therefore accessible to everyone: the universities, but also, and especially, the general public. We work on the discoverability of science in French and are committed to open source knowledge sharing. The Érudit platform is well used. Nearly 34 million documents are downloaded annually by 5.6 million users. Nearly two thirds of these consultations come from abroad, clearly demonstrating that the knowledge produced in Canada is researched internationally.

I am very grateful to all those who believe in Érudit, those who support us financially and as partner-collaborators. I am also thankful to the thousands of researchers who use Érudit's services daily.

Second, I would say that on the high seas, where Érudit navigates, there are immense challenges, waves and storms to negotiate. The biggest challenge right now is the ability to compete with titans, international corporate giants. The oligopoly of large publishers, an issue that has come before this committee, disseminates very little science in French because it is not profitable enough. In that context, without players like Érudit, science in French simply

would not be disseminated or would be for only a small group willing to pay for it. With Érudit, Canada conserves scientific heritage in human and social sciences, maintains control over the results of research done within institutions and keeps this knowledge and data on local servers to use them independently without any commercial considerations. With Érudit, we also support a central function of so-called national and international journals, which is to provide a place of publication for the results of research into specifically Canadian problems, likely to directly affect our society.

Third, and by way of conclusion, I would say that on the high seas, where Érudit is currently navigating with those who lead these Canadian academic journals, the sea is quite agitated. We are living in a time of turbulence and change. There are both great opportunities and great risks. I would say that we need to reclaim scholarly publishing and that requires stable and predictable funding, as well as funding programs that favour the non-commercial model, open science, valorization and the recognition of researchers who ensure leadership for journals and the supervision, writing, evaluation and review of articles. Enhancing knowledge generation in French to its rightful place as a public good is of national interest to us. We need a concerted effort by all players to get through this storm.

Recent political announcements on open science and open access, such as Plan S or the new White House policy, are encouraging to me.

Will we finally take these opportunities to build the most open and diverse system there can be?

Thank you for your attention.

• (1840)

[*English*]

The Chair: Madame Niemann, we are grateful that you're here, and thank you for your testimony.

Now we'll go to Professor El Zaïm for five minutes, please.

[*Translation*]

Dr. Adel El Zaïm (Vice-President, Research, Creation, Partnership and Internationalisation, Université du Québec en Outaouais): Thank you, Madam Chair.

Members of the committee, let me thank you for your excellent work, which will have an impact on the Canada of the future. On behalf of the Université du Québec en Outaouais, I assure you of our full collaboration for the future of science and research in Canada.

As you know, for decades we have been questioning the place of language and the place of French in scientific research and publications. Colleagues who spoke before me provided you with excellent ideas and shared a lot of data with you.

As for me, I would invite you to think more about what motivates a francophone researcher to conduct and disseminate their research in English. I will also make some recommendations.

To understand the problems, I would like to make the distinction between the following two steps: conceptualizing and conducting the research, then disseminating the results of the research.

In the first step, the researcher outlines their plan and drafts research questions, hypotheses and methodology. They also have to read their grant applications and submit them for review in order to receive funding before undertaking the work. This is the step where the language of education and the language of the discipline come into play, as well as the language of the collaborators and the language in which proposals and research reports are drafted.

A discipline developed in English cannot be required and expanded in French if it is not completely translated, taught and disseminated in that language. Canada has been a pioneer when it comes to new terminology and disseminating science and discovery in both languages.

My first recommendation is that Canada commit to translating new science and the results of research done here in the country's two official languages.

My second recommendation is that these translations and terminologies be disseminated globally free of charge, especially within the francophonie in Canada and abroad.

In a country like ours, we expect academics to be bilingual, even multi-lingual, but that is not always the case. During his appearance at the committee, the vice-president of Natural Sciences and Engineering Research Council of Canada assured members that project proposals in French are treated appropriately, suggesting that jury members are able to read and evaluate applications in French. I tend to believe him. It is more a question of the definition of bilingualism and the degree of mastery of the French language required for reading, understanding and debating in French.

When it comes to language, economy of effort is well established. People switch languages to communicate more easily and to make others more comfortable. This applies in developing and evaluating research projects.

At this stage, I would like to make two other recommendations.

The first is that project proposal evaluators master the language the proposal is drafted in and be able to publicly debate it.

The second is that Canada, through research councils, develop measures to help anglophone scientists master French.

The publication and dissemination of results comes with its own linguistic mechanisms and requirements. The questions we should be asking are the following: is the publication geared to students, collaborators, the community or policymakers? Which publisher, platform or journal is publishing the results and what is the degree

of their influence? What are the roles of indexing and the influence of indicators such as the impact of journals?

Unfortunately, most international journals and databases give little importance to languages other than English. Researchers wanting to increase their influence and the number of times they are cited will use English, thereby fuelling the vicious circle.

I have two more recommendations.

The first is that Canada ally with other countries to increase the number of journals and books in French and to ensure they are disseminated and suitably indexed on platforms such as Érudit, for example.

The second is that Canada influence producers of major databases and give an equal place to French publications, where they exist.

Scientific research is increasingly international thanks to globalization and the resurgence of global problems confronting researchers and decision makers. However, these same problems have local specificities that are imperative to study and disseminate in the local language.

• (1845)

Many countries learned that the hard way since the research published in English or a foreign language was not understood by their own citizens and decision makers.

We are not there in Canada. However, we need involvement and a serious commitment from our institutions to ensure that all Canadians can develop—

[*English*]

The Chair: Excuse me, Professor El Zaïm.

[*Translation*]

Dr. Adel El Zaïm: —and learn—

[*English*]

The Chair: Can you hear me? I'm sorry to interrupt.

I know that our committee will be very glad to hear from you. Thank you for being here to testify.

With that, we will now go to our members, who are keen to ask you questions. Tonight we will begin with Mr. Tochor.

Before I turn the floor over, I want to welcome member of Parliament Arya to our committee. Also, I would like to take a moment to thank our clerk, our analysts, our interpreters and everyone who supports this committee. We're very grateful to you.

With that, I will turn it over to Mr. Tochor for six minutes, please.

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

Thank you so much to our witnesses for their presentations tonight. I appreciate Tanja being here in person.

I have some questions about the work you guys are doing. I apologize for not fully fleshing out the research before coming here tonight.

Can you tell me a little bit more? You're not a journal. You're not a review. You're a database of reports. Is that correct?

[*Translation*]

Ms. Tanja Niemann: Yes, that is correct.

We are a platform and a disseminator. We are not a publisher. We work with more than 200 journals that are independent editorial entities and have a production and dissemination contract with Érudit.

We bring together content produced independently on our campuses by researchers who are directors at these journals. For example, we have some in criminology, sociology and history, from campuses at the University of Toronto, the University of Alberta, the University of Manitoba, Simon Fraser University, Dalhousie University and here and there across the country.

We intervene at the end of the editorial process, when all the editorial work is done and the article is ready. We receive these articles and we structure the content to make it legible by machine. We index all this in databases. We take care of a preservation strategy and send all this data on the Web, in databases of catalogues and libraries around the world to increase the chance that these articles are discovered, read, and found when searched with a key word.

What is more, we also ensure that everything is found on Google and is discoverable by Google.

[*English*]

Mr. Corey Tochor: To follow up on that question, what would stop you from publishing more, be it every piece of work, every piece of research done in French, or if there is, perhaps, some kind of research that is done related to the field of French? I guess my question is this: What are the limiting factors to having more things in that database?

Ms. Tanja Niemann: Thank you.

[*Translation*]

Thank you for the question.

We work in human and social sciences.

Érudit was founded in Quebec with a view to preserving a place of publication for French journals in order to prevent commercial publishers from buying them up and ultimately not publishing them because they deal with topics that are more local, regional or Canadian and the company publishes international journals only. The idea was to preserve this publication capacity for journals that deal with local topics.

What is more, Érudit does not limit itself to French; many journals of this kind come from English Canada. At its core, Érudit hosts francophone content because its members are Quebec universities that founded it, but now it is a national platform that hosts content in both languages. For now, the content is mostly in French,

but a lot of English content has been added over the past few years through very productive and fruitful collaborations with university libraries and other anglophone journals.

The thing that is preventing us from growing more quickly is our limited capacity. This project is funded by research funding and often we even have to press for the creation of funding programs to which we are eligible. It is a complicated financial arrangement based on different sources of funding. We are a non-profit organization so we depend on support from the universities. We develop many partnerships and that is very demanding. For now, we maximize the resources we have and the funding we get from contributors.

• (1850)

[*English*]

Mr. Corey Tochor: In the last six years, have the monies received from federal programming increased, decreased or stayed flat?

Ms. Tanja Niemann: It has increased because we really worked very hard on that. We tried to make good progress and show it to the funding agencies.

We were successful in the grant applications. Every year, during the last three or four years, I did a major grant application with my team to work on the success and to get more grant money.

Mr. Corey Tochor: Quickly, you said that two-thirds of the people who are downloading articles are overseas. Where in the world, roughly, would the majority of those two-thirds be? It is French-speaking countries, I'm assuming.

Ms. Tanja Niemann: Yes. It's not only French-speaking, though.

After Canada, it's France. Then it's the U.S. Then it's countries like Germany, where we have heavy research countries. Then it's other countries from the Francophonie—mainly Belgium, Cameroon, Algeria and so on.

Mr. Corey Tochor: I think we're out of time here. Thank you so much for the presentation.

By the way, Madam Chair, the Conservatives are going to take the first round on all the panels, but the additional panel rounds will go to the Bloc.

The Chair: Thank you so much, Mr. Tochor. You're always so gracious.

With that, we will go to Ms. Bradford for six minutes.

The floor is yours.

Ms. Valerie Bradford (Kitchener South—Hespeler, Lib.): Thank you to both of our witnesses this evening.

Ms. Niemann, you studied in Germany. Is that correct?

Can you tell the committee about your experiences or your observations of publishing research internationally in a language other than English?

Ms. Tanja Niemann: Thank you for the question.

There is a heavy tendency of publishing in English for, I think, everybody working in universities and the academic sector because there's this predominance of English as the lingua franca in science.

Nonetheless, we have a lot of colleagues in Europe, for instance, who are working at the same not-for-profit publishing endeavours as us. More and more there is the wish to continue to have these venues where we can publish in multilingual ways and publish about national, regional and local topics in the language where we live and where we experienced these questions we have about society.

There is a tendency around the world where, more and more, we try to preserve these publishing venues where we can publish in different languages. Still, it's mainly in the humanities and social sciences because the STEM sector is so dominantly English.

• (1855)

Ms. Valerie Bradford: Thank you very much.

During our last meeting, Marc Fortin, the vice-president of the research grants and scholarships directorate at the Natural Sciences and Engineering Research Council, told the committee that on average “only 10%” of the applications received are in French.

Do you have any thoughts on why the number of applications is so low? Do you have suggestions that would help increase the number of researchers applying for federal funding in French?

[*Translation*]

Ms. Tanja Niemann: I do not know those figures because they concern other disciplines, not the Social Sciences and Humanities Research Council. I am not sure if those figures are comparable in my field.

That being said, I think there is a perception that we would have better luck if we submitted an application in English, the claim being that if we did, we would be better understood, have access to a broader pool of evaluators and increase our chances of getting a grant.

These are questions we ask ourselves when we send in applications to the federal government. We wonder whether we have a better chance of getting a grant if we submit an application in French or in English. We also wonder about the language abilities of external evaluators.

[*English*]

Ms. Valerie Bradford: I wanted to mention that I did have the honour last week of attending the NSERC prizes for 2022 over at the Museum of Nature, which I would encourage everyone to go to if you haven't been there. It's an amazing facility.

Anyway, what I wanted to point out was that pretty much all of the presentations were done in French. There was no interpretation. Not all of these researchers were from francophone universities.

There were U of T, the Toronto Metropolitan University and U of W. I found it quite interesting that the presentations were primarily done in French.

We have heard contradictory information about access to funding for French researchers. Some witnesses have said that post-secondary institutions do not sufficiently support French researchers, and some say there's a lack of funding. Others say that funding is available but their researchers aren't applying for it.

Can you give the committee your thoughts on where the challenges lie and what you think can be done to support French research in Canada?

Ms. Tanja Niemann: I believe that if we dedicate more resources specifically to French publications and support this in more than the usual way, we can increase the attractiveness of publishing and submitting these requests in French.

The cost may sometimes be higher when it comes to journal publishing, which is the space I work in. I know that there are additional fees for translation, for instance. Sometimes journals attract manuscripts in English and then translate these in order to publish the original research in their journal to make it an attractive journal. To have good applicants, they need to do so, but these are additional funds and additional costs, and they really need to decide to spend or not to spend on these things.

Ms. Valerie Bradford: I have a question for Mr. El Zaïm. I'm sure my time is almost running out.

The committee heard testimony that certain areas of study, including science, engineering and mathematics, are less likely to be offered as francophone post-secondary programs or have research published in French. Tanja has alluded to that. Quickly, please, are certain academic disciplines more representative of francophone research publications than others, Mr. El Zaïm?

[*Translation*]

Dr. Adel El Zaïm: Thank you for your question, Ms. Bradford.

Naturally, some disciplines are more represented in a given language, as confirmed by many studies on the matter. However, the reasons listed alone do not explain the predominance of one language such as English, for example.

[*English*]

Ms. Valerie Bradford: Do I have any more time or am I over, Madam Chair?

The Chair: Thank you so much, Ms. Bradford. That takes you to your six minutes.

Ms. Valerie Bradford: Thank you.

The Chair: Thank you for the questions.

Thank you to our witnesses.

With that, we will go to Mr. Blanchette-Joncas for six minutes.

• (1900)

[*Translation*]

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

Let me begin by welcoming the witnesses who are joining us this evening and thanking them for being here.

Dr. El Zaïm, as always, it is a pleasure to welcome you to the committee. I remember very clearly the comments you made during your last appearance. You said that French was fundamental, including in the area of research.

In your speech you made some recommendations. You talked about the possibility of translating all the research and publications in both official languages.

Several witnesses who appeared before the committee have told us that this could be part of the solution, but some people had doubts and concerns about getting scientific publications, including in certain human or social sciences, translated. According to those people, when scientific research is done, language is more than just words, it is a way of thinking about and seeing things. It would not necessarily be possible to translate every scientific publication.

What do you think?

Dr. Adel El Zaïm: Thank you.

In fact, many countries are already making a tremendous effort to get the sum total of knowledge available translated into their national language because those countries understand that these translations are needed for their citizens, their students and their researchers. Countries are even translating old books, such as books of German, Russian or Chinese philosophy, into national languages. I am thinking about Arabic, for example, which is my mother tongue. Countries are devoting a tremendous amount to the publication of translated works.

Professional translation is feasible. It takes an effort to create the necessary infrastructure such as the development and publication of terminologies, for example. I know that Canada and Quebec are very strong in developing terminologies. We have offered solutions to the entire world in French and in English and we can continue that effort. This takes a lot of investment, and obviously some concepts are different, but when we translate the work of a German philosopher into French, there is an art to the translation. We know how to translate them and how to transfer the terminology into the target language.

I dare say it is feasible.

Mr. Maxime Blanchette-Joncas: Thank you, Dr. El Zaïm.

Should the federal government's grants be awarded on the condition that the research and of course the scientific publications are translated in both of Canada's official languages?

Dr. Adel El Zaïm: I would say that should absolutely be the case, but that is a personal opinion. I think there should definitely be translation from English to French.

Mr. Maxime Blanchette-Joncas: Thank you.

In your recommendations, you mentioned increasing the number of scientific journals. I think you know the picture, but when we look at what has happened in the past 60 years, we see that there is only 8% of francophone content in the new scientific journals. What can you propose to reverse this trend?

Dr. Adel El Zaïm: I propose the publication of translations, but also financial support for researchers and institutions to get these publications translated or even written in the second language from the start, French in our case.

I strongly suggest the translation and publication of original French products into English. We want to promote French, but we also want Canadian anglophone speakers, evaluators and researchers to have access to francophone scientific product.

This does not happen on its own. It takes funding. *Érudit* is a good example.

Mr. Maxime Blanchette-Joncas: Thank you, Dr. El Zaïm.

Witnesses recently came to committee and reported that the rate of grant applications submitted in French was lower than the rate of grant applications submitted in English. This raises a lot of questions.

When applications are made in a language other than English, the research and publications that follow are necessarily in English. Do you think that the federal government should make recommendations or proposals to reverse this trend? For example, should the government not grant more funding for scientific content, research and publication in French?

Dr. Adel El Zaïm: We have to assure researchers, research teams and applicants that their applications will be properly analyzed and evaluated. We had an example of this yesterday: the Natural Sciences and Engineering Research Council of Canada assured us this was the case.

Some things are obvious. If a person studies artificial intelligence in English, it might be difficult to draft a proposal in French. That is why one of my first recommendations was on teaching French and education in French.

Yesterday, I had the opportunity to read the bibliography of a Canadian personality known internationally for their work in artificial intelligence and I noticed that 90%, or almost all of the publications were in English, when the person is a francophone and even a polyglot, who lives in a francophone city. However, their discipline is in English.

• (1905)

Mr. Maxime Blanchette-Joncas: Dr. El Zaïm, I would like your advice on what should be done to find solutions to this.

Should there be incentives, including for grants? Should we ensure that in the selection criteria, the federal government's subsidizing organizations award points for scientific research and publication in French?

[English]

The Chair: Mr. Blanchette-Joncas, might you like to ask for a written response there? It's a short question.

[Translation]

Mr. Maxime Blanchette-Joncas: I believe I heard Dr. El Zaïm say yes, Madam Chair, but I am not sure.

Dr. Adel El Zaïm: Yes, indeed.

[English]

The Chair: A written response is perfect.

[Translation]

Mr. Maxime Blanchette-Joncas: I would be pleased to receive a written response from Dr. El Zaïm if he has anything to add, but I am already satisfied with his answer.

[English]

The Chair: Thank you so much, Monsieur Blanchette-Joncas.

Now we will go to Mr. Cannings, please.

Mr. Cannings, the floor is yours for six minutes.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): Thank you.

Thanks to the witnesses for being with us this evening.

I'll start with Ms. Niemann. Just for clarification, I think you were cut off at the very end of your presentation. You mentioned something very briefly, then you just went on to something else. I think you mentioned the Plan S from the United States. I have no idea about it. It seemed important, so I'm just giving you some time to expand on that.

Ms. Tanja Niemann: Thank you very much.

[Translation]

Yes, indeed, it is very important. These are directives, policies and policy movements that governments currently adhere to, that are in favour of open science and open access.

In Europe, Plan S, developed by cOAlition S, requires governments to subscribe to this movement to make full open access to research a reality. It is accompanied by measures and technical requirements that publishers must comply with. It is truly a political movement, a political framework that prescribes open access and open science with a view to augmenting the discoverability, development and dissemination of science, as well as respond to the problems we are facing with commercial publishers.

For the second part of your question, in the United States, the White House published a directive to every federal agency to implement programs over the next few years prescribing and dictating open access to research funded by the government

[English]

Mr. Richard Cannings: Thank you.

I'd like to turn now to Dr. El Zaïm just to get some clarification. I think Monsieur Blanchette-Joncas was talking about these things. You mentioned your first two recommendations were that Canada must commit to translation of some research documents, and that the translations should be disseminated freely. I'm just wondering if you could comment on the practicality of that with copyright issues and with costs, if it's done freely.

Is this going to be restricted to materials that are coming from open access journals, or will it also include the standard journals of science, for instance, where there's going to be a copyright cost, but there's also going to be, I think, a considerable cost to translate? Maybe you could comment and, say, give a guesstimate on how much it would cost to translate a standard research paper.

• (1910)

[Translation]

Dr. Adel El Zaïm: Thank you for your question.

I do not have a business plan for a national project like that. I am working from the experience in other countries and other organizations that publish. In Canada, the Translation Bureau could possibly do a feasibility study like that. We know that the efforts are there.

Of course, we are talking about publishing most articles, but especially based on need and in the directions we want. As such, do we need to publish in French more articles on artificial intelligence that were originally written in English? Should they be translated into French or vice-versa?

I am not talking about a \$100,000 project or a one-year project. This is a lifelong project, a national project that a country should engage in. It is an ongoing process.

[English]

Mr. Richard Cannings: Thank you.

How much time do I have, Madam Chair?

The Chair: You have a minute and a half.

Mr. Richard Cannings: Okay. That's lots of time. I would like to maybe stay with Dr. El Zaïm.

We've heard various witnesses throughout this study talk about the concept of impact factor when evaluating research and evaluating grant applications. I'm wondering about your thoughts on that. Is that changing? We've heard from some that there might be movement away from, say, the citation indexes for impact factors.

I want to give you some time to discuss that whole part of this conundrum of how we evaluate research without that.

[*Translation*]

Dr. Adel El Zaïm: Currently, impact factors are strongly disputed, especially when they are identified as impact factors for research whereas, in reality, they are visibility factors for a journal or a paper, based on the number of times a specific paper has been cited.

What is needed today is a thorough assessment of the impacts of research on society or on the innovations made by a country or a society. Right now, when we measure the impact factor, we are actually measuring visibility, not the impact of the actual content.

There are national and international movements can help us to go further in that direction. I am thinking of the DORA declaration, which you undoubtedly heard about in previous meetings.

[*English*]

Mr. Richard Cannings: Thanks.

The Chair: Thank you, Mr. Cannings.

Again, thank you to our witnesses for all your answers and your testimony. We're now going to go to the second round for five minutes. The Conservative Party has graciously given their time to the Bloc.

[*Translation*]

Mr. Blanchette-Joncas, you have five minutes.

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

Dr. El Zaïm, in your opening statement, you made some recommendations. One of them references the fact that Canada could promote scientific publication in French at the international level.

Do you think Canada is playing a leadership role when it comes to increasing the influence of French? Would it be possible to communicate better with the 300 million or so French speakers around the world?

Dr. Adel El Zaïm: Definitely.

Canadian leadership needs to be reaffirmed and strengthened. International communities, francophone and non-francophone alike, are watching us closely and asking for our collaboration. I would even say that Canada has a role to play in order to help save French in some francophone countries. There is some international competition in that regard.

Some francophone countries are becoming anglicized. I was in Tunisia and Morocco recently, and I visited more anglophone universities than francophone ones. The people I met addressed me in English more than in French. I have nothing against English, on the contrary. I want everyone to speak more than one language. That being said, it pains me to see French regress or even disappear.

Canada, Quebec and every other province must be leaders in the international Francophonie. We need to regain our place.

• (1915)

Mr. Maxime Blanchette-Joncas: Thank you, Dr. El Zaïm.

To add to what you just said, the Agence universitaire de la francophonie, which has more than 80 member countries, is headquartered in Quebec.

Ms. Niemann, it is good to see you in person.

We know that there has been a global trend of publishing scientific papers in English for decades. As I said earlier, only 8% of learned publications created in Canada since 1960 are in French, and 17% are bilingual. In that difficult context, how can a platform like *Érudit* find success?

Ms. Tanja Niemann: Thank you very much for that question.

Érudit is a platform that is almost 25 years old and growing every year. With its current capacity, 20 to 25 new titles can be added each year, sometimes 30. Very few of them are in French. They are mostly bilingual or come from English-only publications.

I do not think the platform is overloaded yet. Year in and year out, our services to the research community are in high demand. New publications are created, and others want to pick up a subject that was abandoned to get in touch with international colleagues and build networks. Indeed, vibrant research communities often form around specific publications.

Instead of working in silos, we obviously keep developing French content, in parallel with English content, and integrating it into international networks.

Let us not forget the importance of international collaboration with platforms that share content in languages other than English. We have to keep working with colleagues in France and Latin and South America, where there is a strong tendency—a tradition, even—to publish in non-commercial publications.

Mr. Maxime Blanchette-Joncas: All right.

We know how important open access is, especially when it comes to the diffusion of science, specifically in French. Annie Pilote, from the Federation for the Humanities and Social Sciences, appeared during our committee's last meeting on that very subject.

Do you think the government is doing enough to facilitate access to data from scientific publications in French?

Ms. Tanja Niemann: I believe that there is still an enormous amount of consultation to be done and that we need a more global approach.

The Chair: Sorry for interrupting, but the member's time is up.

[*English*]

Perhaps Monsieur Blanchette-Joncas would ask that the answer be provided in writing.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Yes, I would like a written answer from Ms. Niemann. I will happily get back to this topic in another round of questions.

[English]

The Chair: Yes, you will.

Thank you so much to both of you.

We will go to Mr. Collins for five minutes, please.

Mr. Chad Collins (Hamilton East—Stoney Creek, Lib.): Thanks, Madam Chair.

Welcome to our witnesses here this evening.

Madam Niemann, I was very intrigued by the stakeholders you have participating in funding the digital library. Could you share with us how the funding component breaks down on an annual basis? You receive federal support—you made that very clear—and it's increased over the years, but also provincially and either from the university sector...

Could you share with us the revenues that feed into the digital library and how that's funded on an annual basis?

• (1920)

[Translation]

Ms. Tanja Niemann: Yes, of course.

Érudit has an annual budget of about \$4.3 million, approximately 18% of which comes from founding universities. Their contribution includes, for instance, financing the space that my team of 40 Érudit employees uses at the University of Montreal. Sometimes, the financing comes as in-kind contributions.

Starting this year, the Government of Quebec provides \$500,000, an amount that was recently increased. Revenues from university libraries amount to \$1.4 million. The rest of our \$4.3 million budget comes from the federal government, through the Canada Foundation for Innovation and the Social Sciences and Humanities Research Council.

[English]

Mr. Chad Collins: Thank you for that.

I asked that question because I think in your opening you mentioned that, in a perfect world, stable funding is required in order to allow you to function at an optimum level, and I know the not-for-profit sector—having worked with them for many years as a former city councillor—is a very competitive environment in terms of trying to secure government grants and support. When you reference stable funding, what do you have in mind?

Ms. Tanja Niemann: Thank you for the question.

I think it's really important to have a national plan for open science and open access.

[Translation]

Such a plan must be linked to research funding and grants programs. What is going on right now in university libraries must be taken into account as well, because they want to contribute to open science and open access to cast off the burden of having to pay the big commercial publishers. We also need to work with universities and reclaim the editorial and learned publishing process to fully support it, both horizontally and vertically, so that we are no longer left to the whims of big commercial publishers.

I think that support for learned publications has to be based on public funding and a strong national plan for open science. Other countries have already taken these steps. We need to think about how digital infrastructure is set up. Everything we do relates to technology. Our open technology and digital infrastructure are based on human data and know-how, which has to be protected for longer than what two-year research grants allow. We need to retain and invest in the workforce to see long-term results and achieve greater capacity in the future.

Making sure that policies and programs are in line is also important. Otherwise, it becomes very difficult from an operational standpoint to take the next steps in development and innovation to compete with the major players, who are still commercial in nature at this point.

[English]

Mr. Chad Collins: Thank you.

Very quickly, then, Professor El Zaïm, we've heard from multiple witnesses that all stakeholders need to play a role in encouraging and increasing the number of French research publications in Canada.

In your recommendations to us, in your opening statement, you mentioned, quite clearly, what you expect from the federal government. What role do post-secondary institutions in the province play in the recommendations you provided to us earlier this evening?

I'll take that in written form, if I could, Madam Chair, because I think I'm out of time at this point.

The Chair: Thank you so much, Mr. Collins. Yes, you're out of time and we'll have that answer, if we may, in writing.

Thanks so much to you all.

We will now go to Monsieur Blanchette-Joncas for two and a half minutes.

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you, Madam Chair. I have a brief question for Ms. Niemann and then I will proceed with my motions.

Ms. Niemann, I referred to Mrs. Pilote's recommendation to “encourage the federal government to support open access publishing in French so that research papers can be found, read and disseminated by anyone with Internet access around the world.”

I would like to know Érudit's views on investing in open access publishing. What is your opinion on disseminating research in French, not only in Canada, but internationally?

• (1925)

Ms. Tanja Niemann: Thank you for the question.

I fully support it. Every day, my work at *Érudit* aims to promote open access and outreach. We consider ourselves lucky to have the support we already have from the governments of Quebec and Canada.

However, in order to grow, have a greater reach and have more influence—an aspect on which we have to work on, as has been made abundantly clear here—even more concerted efforts are needed to advance open science and open access.

We need concrete action for publications and better grants to allow them to transition to the open access model and break free from the current economic framework. People are struggling with that right now. No one is against open access, but we have to find ways to finance the transition to open access and implement tools and services needed to support this publishing model. We have to find ways to do it and to invest in this.

Mr. Maxime Blanchette-Joncas: Thank you, Ms. Niemann.

Should federal funding be contingent on scientific research and publications being available in open access and in both official languages?

Ms. Tanja Niemann: I am very much in favour of that. We have to find ways to do it.

Mr. Maxime Blanchette-Joncas: Thank you very much.

Madam Chair, I am going to move my first motion, which I gave notice of last week:

That the deadline for the submission of briefs in relation to the study of research and scientific publication in French be extended to 5:00 p.m. on Thursday, November 24, 2022.

I will give a bit of context for my colleagues' benefit. As members know, last week's meeting was cancelled, which extended our committee study. However, last week was also the deadline for submissions. During our committee's previous study, which was also extended, we gave witnesses 10 extra days to submit briefs.

I simply want to extend the same courtesy to the witnesses who have already appeared during our current study. A 10-day extension would take us to Thursday, November 24, 2022. I hope to have your support.

[*English*]

The Chair: Thank you so much, Mr. Blanchette-Joncas.

Is there any discussion or hands up among the committee?

I see Ms. Diab.

[*Translation*]

Ms. Lena Metlege Diab: It is a good idea.

The Chair: Thank you.

[*English*]

Is there any other discussion?

Do we have agreement amongst the committee?

Mr. Stéphane Lauzon (Argenteuil—La Petite-Nation, Lib.): It's yes for me.

Mr. Corey Tochor: Yes.

The Chair: Thank you.

(Motion agreed to)

The Chair: Thank you so much, committee.

Mr. Blanchette-Joncas, I believe you said there's a second one.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Yes. I already shared it with my colleagues who are here in person. I will read it. The clerk can then forward it to members who are participating virtually. I move:

That the committee again invite the Minister of Innovation, Science and Industry, François-Philippe Champagne, to testify as part of the study on research and scientific publication in French during one of the meetings of the committee to be held during the month of November.

I will give a bit of context, colleagues. I have made previous requests for the minister to appear before our committee. The clerk made the arrangements, but the minister refused, unfortunately. We do not know why. He probably has a pretty busy schedule. Nevertheless, I want to give him the opportunity to appear.

This study matters a lot to me. Moreover, since we are examining the modernization of the Official Languages Act and the government has recognized the decline of French, the circumstances seem appropriate.

I really want the minister to join us for this study, explain what his policy direction is and tell us what this committee can do to help him implement measures to increase the presence of French in scientific research and publication in Canada.

I ask for your support to allow the minister to appear before this committee.

• (1930)

[*English*]

The Chair: Thank you so much, Mr. Blanchette-Joncas.

I believe we have Mr. Collins and then Mr. Lauzon.

Mr. Chad Collins: Thanks, Madam Chair.

I think it's a reasonable request. I would just ask, if there's an opportunity, to add that we invite the minister to the moon shot study, which is next, and then we allow questions on the research study that we're undertaking now and sort of kill two birds with one stone, so to speak. I'm certainly supportive of that, but I think we should move on from this study, start the next one, invite the minister and then he will be there for both, if that makes sense.

The Chair: Thank you so much, Mr. Collins.

I'll go to Mr. Lauzon.

[Translation]

Mr. Stéphane Lauzon: Of course, we don't know the reasons why the Minister refused to appear for this study. Perhaps his schedule was too full.

With that said, I support Mr. Collins' proposal. Although this study was extended, it is coming to an end, and that will mean we can start our next study. I don't have the Minister's schedule, but perhaps he will be able to free up time for this other study. If that is the case, we could ask him questions about either subject, and kill two birds with one stone.

The Chair: Thank you, Mr. Lauzon.

[English]

I'll have to ask the clerk if there are any further hands.

I see that Mr. Tochor's hand is up.

Mr. Corey Tochor: This study is important enough on its own to have the minister, and I think the next study is equally as important. I would encourage that we should have the minister in on this study before it concludes. I think the month of November is broad enough to find an evening on a Monday night in the five weeks to come.

The Chair: Thank you, Mr. Tochor.

Is there any further discussion, colleagues?

[Translation]

Mr. Maxime Blanchette-Joncas: Yes, Madam Chair.

I would just like to verify with Mr. Collins how we are going to divide the time if we include the Minister in the committee's next study.

I hope the Minister has enough time to testify regarding research and scientific publication in French. Obviously, I am open to the idea of having him testify as part of the next study, but without interfering with the time I hope he is devoting to this study.

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

[English]

Mr. Clerk, you'll have to help me. I don't have the list.

It looks like Monsieur Lauzon has his hand up.

[Translation]

Mr. Stéphane Lauzon: I'm sorry, Madam Chair.

[English]

It's an old hand.

The Chair: Okay, thank you.

Is there any further discussion? I'm hearing a split here, colleagues. We're going to have to come to some agreement. Is the discussion finished on this?

I see that Mr. Collins's hand is up.

Mr. Chad Collins: Can I ask, through you, Madam Chair, to the clerk, when our last meeting is on this one tonight, on the French research study?

The Clerk: We have it scheduled for our next meeting, November 14.

Mr. Chad Collins: Okay. Our next meeting after that is the 21st. Is that too late? It falls within the time frame that Maxime suggested in terms of the month of November. If we did the 21st, we're getting out of this one and into the new one. What's the minister's availability on that day? Can he make the 21st? I don't know his schedule. It's anyone's guess at this point.

I think that's the easiest path forward in terms of accommodating both studies. If the minister is in on the 21st, we're not leaving it too late. We're out of this by a couple of weeks. We're there at the first meeting after this study concludes, and we're on the first day for the next study.

I don't think the 21st is unreasonable in terms of that being the committee's request.

• (1935)

The Clerk: I'll add quickly that we will likely have a first panel of witnesses for the moon shot study on the 14th in the last hour. That's as it's currently set. That can be changed, of course.

Mr. Chad Collins: Okay. Thank you for that.

The Chair: Thank you, Mr. Collins. Thank you to our clerk.

Is there any further discussion?

[Translation]

Mr. Maxime Blanchette-Joncas: Yes, Madam Chair.

I just want to make sure we will have the Minister with us for two hours, the first on research and scientific publication in French and the second on the ambitious international programs.

[English]

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

Is there further discussion from our committee?

Is there agreement for what we heard from Monsieur Blanchette-Joncas, or does this need to be put to a vote?

[Translation]

Mr. Maxime Blanchette-Joncas: It's fine, Madam Chair.

[English]

The Chair: Is there agreement from the committee?

I see some nodding.

(Amendment agreed to)

The Chair: Mr. Lauzon, do you have your hand up?

Mr. Stéphane Lauzon: This time, it is a real hand.

[Translation]

Mr. Stéphane Lauzon: Could we amend the motion we are considering to make sure we are all voting on the same text? I would appreciate it.

We could maybe ask the clerk to change the wording of the motion so it says we invite the Minister to appear as part of the next study, but concerning both studies, with one hour per study.

[English]

The Clerk: That could be moved as a formal amendment. I hesitate to make any of my own changes in the wording without having it submitted to me in writing because that would be a formal motion.

The Chair: Thank you, Mr. Clerk.

We've heard from Mr. Lauzon. Is there agreement from the committee?

The Clerk: I just want to make sure that we're clear whether Mr. Lauzon is moving an amendment or not to that, and whether it needs to be discussed.

The Chair: Mr. Lauzon, could you please repeat what you have brought forward so the committee understands exactly what is being brought forward?

[Translation]

Mr. Stéphane Lauzon: Right.

The motion should state that the committee again invites the François-Philippe Champagne, the Minister of Innovation, Science and Industry, to testify for one hour as part of the study on research and scientific publication in French, with the hour after that devoted to the next study.

[English]

The Chair: Thank you, Mr. Lauzon.

Is everyone on the committee clear on this?

[Translation]

Mr. Maxime Blanchette-Joncas: Madam Chair, I think we should add "on or after November 21" as Mr. Collins said earlier.

[English]

The Chair: Mr. Blanchette-Joncas, we have to check with the clerk. I believe invitations have gone out for the second study.

The Clerk: Invitations have gone out but whatever the committee decides in the motion is doable. If it's adopted we'll move things around.

The Chair: Thank you, Mr. Clerk.

Would you like to read back what the committee is considering and we'll see if they're comfortable with it, please?

The Clerk: I'm doing my best to change it into.... I'll read it in English. It is that the committee invite the Minister of Innovation, Science and Industry, François-Philippe Champagne, to testify as part of the study on research and scientific publication in French for one hour, during one of the meetings of the committee to be held in the month of November, and then for another hour on the international moon-shot programs.

• (1940)

The Chair: Thank you so much to our clerk.

Does the committee understand what's being brought forward?

We'll look for agreement amongst the committee.

Is there further discussion?

[Translation]

Mr. Stéphane Lauzon: Mr. Blanchette-Joncas has proposed an amendment consisting of adding the date.

Mr. Maxime Blanchette-Joncas: Madam Chair, it should specify that the invitation is valid on or after November 21. If the Minister if available to come to the next committee meeting, on November 14, we will not have started the new study yet.

Without making any assumptions about the Minister's schedule, I think the best way of starting the committee's next study is to invite the Minister to a meeting on November 21 or November 28.

[English]

The Chair: Thank you.

Mr. Lauzon, are you comfortable with what Mr. Blanchette-Joncas has suggested?

Mr. Stéphane Lauzon: Yes, of course.

[Translation]

The amendment is moved by Mr. Blanchette-Joncas.

[English]

Mr. Clerk, we just add the date as an amendment from Maxime Blanchette-Joncas.

[Translation]

The Clerk: Instead of saying "in November", we could say "on November 21".

Mr. Stéphane Lauzon: We would have to say "on or after November 21".

The Clerk: Right.

Mr. Stéphane Lauzon: It has to say that the amendment was moved by Mr. Blanchette-Joncas.

[English]

The Chair: Thank you. Thank you, everyone.

Is there agreement amongst the committee on this?

(Amendment agreed to)

(Motion as amended agreed to [See Minutes of Proceedings])

The Chair: That's terrific. Thank you, Mr. Blanchette-Joncas.

It is now my job to thank our witnesses.

We thank you for your time, your effort and your expertise. We hope it's been a good experience for you. We hope that you will consider coming back and seeing us again.

Committee, with that, we are going to suspend briefly so we can set up our second panel.

• (1940)

(Pause)

• (1945)

The Chair: Dear colleagues, I'm going to call us back to order.

Welcome back to the committee.

We are on our second panel tonight. I'd like to welcome and thank our witnesses for being so gracious.

This panel goes until 8:30 tonight.

[*Translation*]

I would like to make a few comments for the benefit of the new witnesses.

Before speaking, please wait for me to say your name. If you are participating by videoconference, click on the microphone icon to activate your microphone. Please put yourself on mute when you are not speaking.

For the interpretation, if you are participating in the meeting via Zoom, you have a choice of channels, at the bottom of your screen, between floor, English and French. If you are in the room, you can use the headset and select the channel you want.

I would remind you that all comments by members and witnesses must be addressed to the chair.

I would now like to welcome our witnesses, who are appearing as individuals.

We have Janice Bailey, scientific director, nature et technologies, Fonds de recherche du Québec. We also have Yves Gingras, professor of history and sociology of science at the Université du Québec à Montréal.

[*English*]

Each will have five minutes to present. At the four and a half minute mark, I will hold up this card to let you know that you have 30 seconds left. We aim to be fair.

Once again, a warm welcome to our witnesses.

We'll begin with Janice Bailey, please, for five minutes.

Dr. Janice Bailey (Scientific Director, Nature et technologies, Fonds de recherche du Québec, As an Individual): Thank you very much, Madam Chair.

I've chosen to speak in English. I thought I was going to be speaking in French, but when I did my homework, I realized that most of the members of the committee have a preference for English. I'm certainly functional in both languages, however.

My name is Janice Bailey, and as mentioned, I am the scientific director of the Fonds de recherche du Québec, nature et technologies, or the FRQNT, which is one of three government organizations supporting and promoting research in Quebec.

Before taking this position in 2019, I was a professor-researcher at Université Laval for 25 years, specializing in the field of reproduction. I worked on animals, humans and the effects of the environment on the health of future generations. I speak today in this consultation on my own behalf.

I'm from Brandon, Manitoba. I am anglophone. I started my research career in English at the University of Manitoba and continued through the University of Guelph and the Perelman school of medicine at the University of Pennsylvania in Philadelphia.

I developed my expertise, my reputation as an expert and my network of contacts in an English-speaking world, but I was offered a position as a professor at Université Laval in 1994. Thus, my husband, who is also a researcher and an anglophone from southern Ontario, and I decided to continue our adventure in the scientific community in French, and we headed for Quebec. It was difficult because neither I nor my husband spoke French very well at the time, but it paid off in the end. Actually, this ability to speak French has provided us with tremendous access to rich scientific communities and networks, which has considerably broadened our professional opportunities. I would not be in this chair today if I did not speak French.

We have conducted research projects in both languages, disseminated our knowledge in both languages and established valuable collaborations in Quebec, Canada, and elsewhere in the world in English and in French. Although we speak English at home, our days are in French, and our son, who is now an adult, studied in French in high school, CEGEP and university. We really believe in the importance of French.

This openness to French has also allowed me to see that research knowledge is partly invisible if it's only in English. The English language is certainly the first language of science in the world, but it is essential to have access to scientific knowledge produced in other languages. In Canada, we have French, of course, but we also have indigenous languages.

We must not or cannot really fight science in English, and that's not my point, but we need to promote it better in French, including research and publications in French. Science is conducted for the well-being and progress of society. Science in French, or any other language, is just as important as science in English. Restricting science to a single language drastically limits its accessibility. As a professor, for those 25 years, I taught in French and regularly conducted public outreach activities in French, often with my graduate students.

Access to knowledge produced in different languages is particularly important in areas such as the natural sciences. I emphasize that access to indigenous vocabulary and traditional knowledge should enhance our understanding of, for example, biodiversity sciences. The future of the planet is at stake, and languages participate in this knowledge and circulation of knowledge.

The circulation of knowledge in a variety of languages also strengthens public confidence in science and research. The phenomenon of misinformation, however, has grown over the past decade, particularly with the emergence of social media.

Scientific information is one of the victims of this misinformation, and disinformation hinders the link between science and society. It undermines the credibility of scientific information and has consequences for individual and collective decision-making and policies on important issues. Access to quality knowledge in a variety of languages based on robust data developed by science and research should be a societal priority. Personally, I don't really like social media, but I pay attention to it. The FRQNT is very active in promoting research in French.

• (1950)

Canada is a rich country—among the richest in the world. We complain, but we are very privileged. Our wealth comes with an obligation to share, especially with less-privileged countries. Scientific knowledge is part of our wealth and must circulate freely. It must be accessible to as many people as possible. This is access that passes through language. The French-speaking scientific communities of Canada and Quebec can be and should be very proactive and build bridges with French-speaking scientific communities where the needs are very great. For example, I have worked—

The Chair: I'm sorry to interrupt. Thank you, Professor Bailey. Thank you for being here and for your testimony. There will be lots of questions.

With that, we will go to Professor Gingras.

[Translation]

The floor is yours for five minutes.

Mr. Yves Gingras (Professor of History and Sociology of Science, Université du Québec à Montréal, As an Individual): Thank you for this invitation. I imagine that I have been invited here because I have been working on the issue of the transformation of science for nearly 40 years. In 1984, I published the first article offering a sociological explanation for what is called the value of a language in a scientific field. In 1991, I participated in a study commissioned by the Government of Quebec on the presence of French in scientific publications. I have also worked with Camille Limoges, who for a long time held the position of deputy minister in Quebec, on a study on the use of manuals in science courses. What strikes me is the reason why we are back here, 40 years later, discussing the same problem: it is because we use general, conflated categories that are not sufficiently precise.

I am therefore going to use the three minutes I have left to at least untangle the problems. I want to make sure that the action the government takes is rational and effective. I am going to show you that it is very easy to have visions that are generous but are inapplicable and do not correspond with the reality and dynamics of science.

The first of these is that we have to stop talking about science in general terms. It doesn't mean anything. We have to separate the natural sciences, on one hand, from the social sciences and humanities, on the other, for one very simple reason: the dynamics in the scientific community of researchers is totally different.

Since the early 1980s, in the natural sciences, for example physics, chemistry or biology, the universal language of academic journals has been English. That must not be confused with the teaching of science in francophone universities, which is done in

French, and the language of manuals or course notes, which also have to be in French. On the one hand, we have the market for scientific publishing; on the other, life in the laboratory. In my opinion, in a laboratory at the Université de Montréal, for example, things have to be done in French; the teaching has to be in French and the manuals have to be accessible in that language. So we must not talk about science in general terms.

When an electron is discovered, for example, that is very specialized. We have this generous idea that the public must have access to the knowledge because it is the public who are paying, but that is absurd. With all due respect, I have to say that probably no one among you here would understand an article about artificial intelligence. That is not a big deal, since the function of francophone science journalists and popular science journals in French, like *Québec Science*, is to make very technical knowledge accessible in French, for example regarding quantum computers, knowledge that is generally published in very specialized academic journals. *Québec Science* is in French. Knowledge is being made accessible in French by Quebec researchers like Yoshua Bengio who publish their fundamental work in the language of computing, which is English.

We therefore have to stop mixing everything together and thinking that translating all scientific publications into both languages will have an effect. A bit later, if we have time, I will tell you about France, where that exact experiment was done, and I predicted its failure. Ten years later, in fact, a stop was put to the experiment, which consisted of systematically translating sociology and political science journals that were completely in English, as if there was a pre-existing market, when there was no demand. Millions of euros were wasted because physics, sociology, history and mathematics were mixed together. The dynamics of the scientific communities are different and that has to be taken into account.

In the case of French, the most important thing for us is to make sure that the practices followed in the natural sciences are not applied to the social sciences and humanities. That is what is being done in the universities by evaluating so-called international journals. A little earlier in the meeting, the term "impact factor" was used. Impact factor is an obsession in the natural sciences that has been transposed to the social sciences. I have written an entire book on that subject. I showed how widespread the confusion was between the impact factor, which measures the impact of an academic journal's impact, and the article itself. They are not the same thing. There is a huge amount of confusion.

In a spirit of generosity, it is thought that translating scientific articles is suddenly going to make the science more visible. I hope I will have time during the question period that follows to show you in detail that if we want to solve problems, we have to explain what we are talking about every time. Are we talking about research in physics or in sociology? Are we talking about the *Érudit* platform or open access? Are we talking about Plan S open access in Europe? These are all different things, and when they are all mixed together, it creates confusion and ineffectiveness.

• (1955)

Thank you.

The Chair: Thank you, Professor Gingras.

[English]

I'd like to thank both of you for being here. We're grateful for your time. You have an eager committee that wants to hear from you.

We will now go to our first round of questions. This will be for six minutes.

I'm not sure who's starting with the Conservative Party tonight.

• (2000)

Mr. Gerald Soroka (Yellowhead, CPC): Madam Chair, that will be me.

The Chair: Thank you so much, Mr. Soroka. The floor is yours.

Mr. Gerald Soroka: Thank you, Madam Chair.

Thank you to the witnesses for coming.

I'll start off with Ms. Bailey, because she comes from a unique scenario.

Most of us are French speakers who then learned English. However, you started the other way around.

One thing previous witnesses talked about was how French speakers applying in the French language were not getting as good a result as English researchers applying for grants. Have you noticed this as well? Were you doing your grants in English or French?

Dr. Janice Bailey: Thank you for that question.

As a researcher, when I applied to federal funding agencies, I wrote my grants in English. When I applied to French funding agencies, such as the one I'm now at the head of, I always wrote my applications in French.

Mr. Gerald Soroka: Did you notice whether there was any difference in getting better results?

Dr. Janice Bailey: Honestly, I believe some of the comments that might occur could be anecdotal.

Certainly, writing scientifically in a language that is not your mother tongue.... Even now, after 30 years, it's harder for me to write in French than in English, but I do it all the time. It is hard to write. I think you need some extra help to write in a different language. Certainly, for anglophones writing in French, it's a lot harder. You need some help to be concise. Scientific writing is ultraconcise. Our grant applications are very small, so you're always asked to keep things trim. You need help.

I'm not sure if I answered appropriately, but, yes, it's hard. From one language to the other, it's hard. It's hard for me to write science applications in English and, probably, hard in French for people with French.

Mr. Gerald Soroka: My question was if you were more successful writing English or French applications. They said people who write French applications aren't as successful.

Dr. Janice Bailey: Do they have data that shows that?

Mr. Gerald Soroka: That's what they were insinuating, so I was wondering if you found that.

Dr. Janice Bailey: In my own experience, I don't see that.

It's harder. It takes longer. There's more work to do. I think people working in French in the Canadian context.... We always have to have our CV in French and English. We have to write our research summaries in French and English, so that's a bit of a pain, but I don't know if the success rates are truly different. I have not seen data to suggest that.

Mr. Gerald Soroka: Thank you for that, Ms. Bailey.

I'll go on to Mr. Gingras now.

You brought up a completely different aspect that I'd never even thought of. On the human and social sciences side of things, you're saying it makes a lot more sense to publish in French, yet, in other sciences, it doesn't. You wanted to dwell a bit more on this. Could you please explain further? I'd love to hear more on this.

Mr. Yves Gingras: Yes. In practice, when we're talking about science in English, we're talking about the natural sciences.

You just gave the example of grant applications. That's, again, a different question. When you apply to SSHRC, NSERC or CIHR, there are, in fact, statistical data by SSHRC that follow up the rate of success for francophones and anglophones to be sure there is no bias.

They follow that up because that's a real question for a very simple reason. If you apply in French at SSHRC and they want Canadians to evaluate this, in practice, although most francophone university professors are bilingual, you cannot say the same of anglophone university professors, who are not bilingual. In being bilingual, you should again distinguish between reading French and English, speaking French, and writing French or English. I do all three of them, but some can read but don't talk. We have to be precise.

For your question, SSHRC will give you the exact number of the rate of success. The reason it's different, and this is my point of view.... The tendency of the three organizations to think that SSHRC should be with NSERC and the three councils should be all together is very nice, but there is a perverse effect to applying the same criteria to social sciences and humanities because social sciences are what I call in sociology "indexical". They are local.

When I work on Brother Marie-Victorin about Quebec science, it would be absurd to publish that in English in Australia. First, they wouldn't be interested. Second, the Quebec people won't read about Marie-Victorin. If I talk about galaxies, there are no Quebec galaxies and there are no Canadian galaxies. Galaxies are universal.

The history of the language used in social sciences and humanities is different from the history of the use of language and English. The problem we now have—and I could give examples in French—is that they think that being international in social sciences means writing in English.

I wrote a paper explaining that the statistical analysis is false. For 10 years, they translated the *Revue française de sociologie* to English. It had no more citations for a simple reason. If you are an American working on France, you already read French. If you don't read French, it's because you're not working on France.

Even if I translate the paper for you, you would not read it. It's not because it's not good; it's because it's not your field. There's a total confusion about all those things.

• (2005)

The Chair: Professor, I'm sorry to interrupt.

Mr. Yves Gingras: That's okay.

The Chair: Mr. Soroka, thank you for your questions.

We are now going to go to Ms. Bradford for six minutes, please.

Ms. Valerie Bradford: Thank you to both of our witnesses for being with us tonight. It's fascinating.

I agree with MP Soroka. It's quite fascinating, Ms. Bailey, that you did all your study and everything in English. You were from Manitoba, yet you've made your career in French. That's really quite remarkable and commendable.

Anyway, I was interested in the San Francisco Declaration on Research Assessment, or DORA. It sets out recommendations to improve the ways in which scientific research is evaluated, including moving away from journal-based metrics as a measure of research quality.

The Fonds de recherche du Québec announced in 2020 that they're signatories of DORA. The committee here has heard testimony to date that an overreliance on journal publications as an indicator of research quality can penalize researchers publishing in French due to the relatively small number of francophone journals and a relatively limited audience in comparison to English.

What has the implementation of DORA principles looked like at Fonds de recherche du Québec?

Dr. Janice Bailey: That's a wonderful question.

When we talk about DORA, we tend to talk quite a lot about the impact factor. Professor Gingras mentioned the historical importance of impact factor, particularly to my field in natural sciences, where people will look at different journals and they have different impact factors. We've tended to use that, historically, as a sign of research quality. If you publish a paper in *Cell*, we tend to say it's a good paper, even if we haven't read it. If you publish it in the journal of growing carrots, we think it can't be that interesting because it's only growing carrots.

That's terrible because the important thing is that it's publicly funded research. It's important to get that information out to the scientific community anyway and I think that impact comes with time.

We signed the declaration of San Francisco in 2020, so it's still a culture change that I am personally trying to help our research community adapt to. The FRQNT is small, but we have a large force. I think we could nudge scientific culture a little bit, along with others.

Forgive me, Ms. Bradford, if I'm not answering your question perfectly well.

Right now I think the important message is that the research is published in peer-reviewed journals and that this information is accessible as widely as possible. That's what's important. It's not necessarily in which journal you publish.

Ms. Valerie Bradford: What impact do you think the implementation of DORA principles will have on the funding and publication of research in French?

Dr. Janice Bailey: I think there could be a positive change because, for instance, I still have a couple of students who are hanging around, and I would really like to see and encourage them to publish in French. Sometimes francophone students in francophone universities might be slow to publish in English. It's very daunting for them sometimes to send out that last article in English, but if I could say, "Publish it in French. Write it in French, and you'll have it for your thesis", then I think that students and their professors might be a lot more open to submitting and publishing in French and sharing their information in French.

I really appreciate what Professor Gingras said about how perhaps just translating everything that's already published in English and French is maybe not useful, but that doesn't mean that a fundamental piece of research that would be published in French wouldn't be useful. I think that would be very interesting. I think especially review articles, which are a phenomenon in natural sciences, are very useful, and I think there's a huge space.

In fact, I would love it if in Quebec we could have journals with review articles that we could write collectively with others around the world. These kinds of journals would be so helpful to francophone nations. I visited Mali. They don't speak English. They don't have access to English literature anyway, so it doesn't matter. They don't have very much access to anything, and I think that if we could have these reviews or journals in French, they would be such a great resource. Those articles are maybe easier for the general public or the highly educated public to read, as opposed to fundamental research papers, which can be very difficult, as Professor Gingras rightly said.

• (2010)

Ms. Valerie Bradford: Thank you.

I have a couple of questions for you, Professor Gingras.

The committee has heard testimony that certain areas of study, including science, engineering and math, are less likely to be offered as francophone post-secondary programs or to have research published in French. Are there certain academic disciplines more represented than others in francophone research publications?

Mr. Yves Gingras: Of course.

In France there is a physics journal that has been published since the 19th century. It's called *Journal de Physique*. The title of the journal is in French but essentially none of the papers in it is in French, because the lingua franca in the 17th century was Latin. Newton wrote his book not in English but in Latin. Descartes also wrote some of his work in Latin. We have to be careful about an abstract view of the world versus a practical view. In mathematics there are very few words: "if...then" and then you have equations. Very basic language is used. Papers are generally four pages long instead of 25 pages, as is the case for sociology or industry.

The Chair: Professor Gingras, you have my apologies.

Thank you very much, Ms. Bradford.

We will now go to Monsieur Blanchette-Joncas for six minutes.

[Translation]

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

I would like to welcome the witnesses who are joining us for the second hour of our meeting.

My questions will be for Professor Gingras.

Thank you for being here, Professor Gingras, and thank you for helping to untangle the question and make the distinction between the social sciences and humanities and the natural sciences.

I want to make sure I have correctly understood the distinction that you say we have to make. On the one hand, there is scientific publishing in English; on the other hand, there are teaching and making knowledge accessible, which have to be done in French, particularly in Quebec, but also in francophone communities outside Quebec.

If I understand your position correctly, systematic translation is not a good solution and is not something that is done in certain natural sciences. Is that accurate?

Mr. Yves Gingras: Not just that it is not done, but if it were done, as the experiment was tried in France, it would be a failure.

In the case of the natural sciences, we have a natural experiment. In sociology, it is not always possible to experiment, because that is not ethical, but there is experimentation nonetheless.

France spent millions of dollars at the Centre national de la recherche scientifique to translate the entire *Revue française de sociologie* because they thought it was not international enough. That was false, but it is what they believed. They said that if they translated the entire journal into English, it would become international. That is ridiculous. I measured the citations effects, from a bibliometrics perspective, over ten years, and found that the effect was virtually nil. Why? For the reasons I explained: the work in that journal relates to France.

Similarly, the *American Journal of Sociology* is not an international journal; it is an American sociology journal. In fact, 90 per cent of its authors are Americans.

The social sciences and humanities field is not the same field as the natural sciences. Why? Because it is indexical. Quebec society relies on Quebec sociology journals like *Recherches sociographiques* or *Sociologie et sociétés*. Similarly, there are *The British Journal of Sociology*, the *American Journal of Sociology* or the *Revue française de sociologie* elsewhere.

• (2015)

Are there physics journals specific to each country? No. I am also a physicist and, as such, I am a member of the American Physical Society. Why? Because the work done by Americans in physics is important. When we talk about electrons, for example, we often speak in English.

So the social sciences have to be put in a separate category.

In addition, we have to invest where it is necessary. For example, if the Polity Press asks to have the book I have written in French translated into English, then it is worth subsidizing the translation. However, if it is to be translated simply because it falls within a generalized request for translation, that is absurd, it is money wasted.

What happened in France? In 2017 or 2018, the French stopped translating everything, after finally understanding what I was trying to get them to understand. The empirical data that I collected actually showed it; translating everything is irrational in economic and scientific terms. Deciding to translate everything means conflating what my father is going to read and what the scientific community is going to read; my father is going to read *Québec Science*, but he will not read an article about artificial intelligence written by Yoshua Bengio, who won the Turing prize. That is absurd.

It is important to separate things properly and invest in the right place.

Mr. Maxime Blanchette-Joncas: If I understand correctly, translation can be more worth considering in the social sciences and humanities, and that is where the focus is more than on the natural sciences.

In addition, you talked about access to manuals in French. I am trying to understand what you are saying. When something is published in English, you then have to be sure you have a translation into French, if you want the teaching to be in French, particularly in Quebec.

What concrete recommendations can you make to the committee for more emphasis to be put on French in research and scientific publication, particularly in social sciences and humanities?

Mr. Yves Gingras: In the natural sciences, French has an important presence when it comes to teaching. However, a situation may arise in which a francophone university hires someone who has an excellent reputation but is unable to speak a word in French, in the name of international competition.

A few years ago, *Le Devoir* published a letter from a student enrolled in physics at the Université de Montréal. She had arrived at her master's seminar class and realized that the class was in English, when in fact, as she said, she had not enrolled at McGill University, she had enrolled at the Université de Montréal.

That is why I say that a distinction has to be made between teaching and publishing. If a person enrolls in a master's program at the Université de Montréal and the professor does not speak French, they would have done better to enrol at McGill or Concordia University.

The chancellors have to stop saying that they want their universities to be competitive at the international level and at the same time that they offer programs in French. Often, you just can't eat your cake and have it too. So there are priorities other than what gets said. On that point, I'm being a bit blunt, since we have very little time. If we are serious, does international competition necessarily mean hiring a unilingual English-speaking person? Is that person really the best one? Thinking it's better because it's in English is a kind of colonialism; it is often false.

Mr. Maxime Blanchette-Joncas: You have talked about content, but I would now like to talk about the presence of francophones and Quebeckers in research chairs.

In the 1930s, Jacques Rousseau did research on the presence of French Canadians, Quebeckers and francophones in the scientific community. Today, in 2022, do you have any data in that regard? Almost 100 years later, do we need to be concerned about the presence of francophones and opportunities for them to contribute to scientific research in their mother tongue?

Mr. Yves Gingras: To my mind, no. I have done several studies on this, and there are ways to measure scientific impact at a macro level. The impact of the Quebec scientific community is about 20 per cent above the global average. The global average is 1, while Quebec's is 1.20.

Francophone researchers in the natural sciences are integrated into the global field, whence the title of my old article, "La valeur d'une langue dans un champ scientifique", which is still valid in sociological terms. A scientific field is a community. The Quebec astrophysicists at the Université de Montréal or Université Laval who participate in a conference speak with the other participants, whether they be Chinese, Americans or whatever else, in the *lingua franca*, which is English. The use of English in the natural sciences is not a problem in any way, in my opinion. We have to let go of this issue in the case of the natural sciences, because it was settled 30 years ago. Instead, we need to focus on the social sciences and humanities.

Mr. Maxime Blanchette-Joncas: So we are going to focus on the social sciences and humanities.

I was looking at the recent data collected by the Canada Research Chairs. Since 1980, scientific publishing in French in the social sciences and humanities has fallen off by 25.6 per cent.

Mr. Yves Gingras: Yes, and that can be explained by the pressures of evaluation...

[English]

The Chair: Mr. Blanchette-Joncas, I'm sorry. That's your six minutes.

We will now go to Mr. Cannings for six minutes, please.

• (2020)

Mr. Richard Cannings: Thank you.

Thank you to the witnesses. This has been very interesting.

I'll start with Professor Bailey to maybe clarify something that Mr. Soroka mentioned about the success of applications in French.

I flipped back in my notes to Professor Fortin from NSERC, who mentioned that 26% of NSERC applicants are francophones, but only 10% of applications are submitted in French. He also said that the French applications from bilingual universities such as McGill and the University of Ottawa had more success than those submitted in English. It's not as Mr. Soroka was saying, or at least in that case. I couldn't find anything in general, but it seems that the French applications were as successful—or more successful, in those cases.

I'm wondering if you could comment on when you are submitting an application or working in a bilingual environment like the University of Ottawa or McGill and you have that community around you that can help you edit in French and things like that. We've heard this from some...

Dr. Janice Bailey: I'm glad that Monsieur Fortin provided those data. I know that, as Professor Gingras said, the tri-councils follow these data very closely. To the best of my knowledge, I've not seen that there's a big discrepancy. The success rates do not seem to be heavily biased by the language of submission. I could be wrong, because this is not something I looked at yesterday.

In terms of the environment, if you're a scientist, you think very carefully about what language you're going to submit your application in. If you are going to try to write it in English and you're francophone, you're going to have someone help you and vice versa. That's what I tend to see.

I have to say that McGill in my experience is much more English. I don't really consider McGill to be bilingual, per se, but I think most people or many of the applicants from McGill are functional in both French and English.

Mr. Richard Cannings: I think we've heard that about McGill here as well.

I'd like to turn to you now, Professor Gingras, on a little detail. I've read a couple of the papers you've written on the subject, and you've mentioned the "Matthew effect". It seemed important, but I didn't know what it was. Could you maybe explain that and how it relates to this?

Mr. Yves Gingras: Very simply, it's the fact that once you have acquired a certain visibility, you will be given more quality than in fact you have. I think it's the case for English. I'll be very frank.

We talk about “rent”. You can have rent on petroleum, like Alberta, and you can just sit on the rent. There is a linguistic rent that we never talk about. In Quebec, McGill and Concordia have a linguistic rent. We think they are better in the world classification of universities. I know very well those rankings. I wrote a lot of stuff on them. It's a linguistic rent, because if you are only a francophone in the world they won't see you as much as they will see an anglophone: “Yes, we know very well McGill and Concordia. What is this Université du Québec à Montréal? What is that?”

There is a linguistic rent, and the Matthew effect is the same thing. For example, if I write a paper with my student, he signs his name beside mine. Since I am quite known, to some extent, they will say, “Gingras wrote this paper.” I can tell them, no, I wrote it with my student, but they won't care. I will get the credit for that. That's the Matthew effect.

The Matthew effect also has an effect on the impact factor. That's a very important paper that we did. We were able to prove that the impact factor in itself has a Matthew effect. This is why we should forbid the impact factor at NSERC. I've asked that for many years, but NSERC doesn't want to do that. It should be forbidden on the committee for a member to say, “The impact factor of this journal is higher.” It should be forbidden. That's easy to do. It's a criteria that they should do at CIHR and SSHRC. In fact, SSHRC doesn't use it, but NSERC has this mania in biomedical sciences. Mathematicians don't use it much, because they know it's garbage.

• (2025)

Mr. Richard Cannings: I come from the biological sciences, so I'm very familiar with what that's like.

Just to continue again, I would just perhaps like to get some clarification on your recommendations around the differences between the natural sciences and the social sciences, and how your recommendations to this committee and to the government would differ.

Mr. Yves Gingras: If we want to help the diffusion of the social sciences and humanities in Canada, the first thing we have to do is put a basic, stable thing in place for *Érudit*. *Érudit* was created 25 years ago. I was sitting on the board of SSHRC, by the way, and the English Canadians were saying, “Why do we need *Érudit*?” I said, “You don't understand. That's the future.” Now they understand it.

That's why I say *Érudit* would be able to absorb the journals in English, also. As we have shown, most are francophone. Some are bilingual, from New Brunswick, and so on. *Érudit* is the basis to look at.

[Translation]

Mr. Richard Cannings: Thank you.

[English]

The Chair: Professor Gingras, I'm sorry, but I have the worst job. You provide this interesting testimony, both of you, and I have to interrupt. I feel very badly about this.

We're now going to go to the five-minute round. I think that will take us to 8:30 p.m. I believe the Conservative Party is giving their time to Monsieur Blanchette-Joncas.

If that's correct, Monsieur Blanchette-Joncas, the floor is yours.

[Translation]

Mr. Maxime Blanchette-Joncas: It is indeed I who will have the floor, Madam Chair.

Professor Gingras, I am going to turn to you again. I would like you to give me some more details concerning the funding granted by the federal government. Should the weight of the impact factor be reduced in evaluating grant applications?

Mr. Yves Gingras: I have always taken the same position on that subject: the impact factor is not well understood. The article gets confused with the journal; that has been proven. It is connected with Lotka's law and is very simple to understand. I have made tonnes of speeches in the world. Often, scientists do not understand and review committees have to be told that they are prohibited from using impact factors, including the h index, which is false, since it is used differently by Google Scholar, Scopus and Web of Science.

So review committees have to look at CVs and not assume, as my colleague mentioned, that an article is necessarily good simply because it was published in *Nature*, for example. A lot of articles in *Nature* are never cited. It is not a synonym for saying it is good.

So the use of impact factors by review committees has to be prohibited. That is very easy to do. The three bodies simply have to adopt an internal regulation.

Mr. Maxime Blanchette-Joncas: What other indicator should be considered, if we want francophones to be able to do research in their language, particularly in social sciences and humanities?

Mr. Yves Gingras: In social sciences and humanities, it is the same thing. When the review committees at the Social Sciences and Humanities Research Council, for example, see an article about Indigenous people that is published in the *Revue d'histoire de l'Amérique française*, they have to know that that is an excellent journal in French. If they don't know it, they are not competent to sit on review committees. That is reality. They think that if it is written in English, it is better. It's the language tax.

When members are appointed to sit on review committees, the agencies have to make sure they appoint people who are familiar with the field, anthropology or sociology, for example, and are familiar with the good journals in France and Quebec in those fields. I am thinking, for example, of *Recherches amérindiennes au Québec*, which is an excellent journal, but it is in French. We must not forget that the people applying for grants are evaluated by their peers, by their colleagues. If their colleagues are ignorant, they are going to evaluate them negatively by mistake.

Mr. Maxime Blanchette-Joncas: I am going to ask you one last quick question, Professor Gingras, since time is flying.

In evaluating funding applications, should the funding agencies include criteria that favour research and publishing in French? Of course, we agree that this applies to certain sciences. Should that be an aspect to consider?

Similarly, should there be representative funding for francophone content, in particular?

Mr. Yves Gingras: No. Personally, I don't believe in that. Science is based on excellence and on peer review. We just have to make sure that the peers have the tools to do the review properly.

The choice of the language of publication is up to the researcher, based on their publishing strategy. When I work on Brother Marie-Victorin, I write in French in Quebec. When I work on Albert Einstein, I write in English in an international journal, because my audience is not the same. When I write about electrons, my audience includes all electron experts, including the Chinese and Japanese. So I can't start burying my text and creating artificial journals.

The idea was mentioned earlier of creating synopsis journals. I would remind you that in the 1980s, a journal called *médecine/sciences* was created. It too was a failure, because the dynamics of science were misunderstood. Science is a sociological community that has its rules, and you have to know what they are before trying to transform them.

• (2030)

Mr. Maxime Blanchette-Joncas: Apart from the impact factor, are there other notable factors that contribute to the decline in the presence of French in the social sciences and humanities?

Mr. Yves Gingras: No. In my opinion, the primary cause of this decline in the social sciences and humanities is the pressure toward so-called internationalization, which is conflated with anglicizing. I could give you examples in the case of France, and even of Quebec. People decide that an article published in English in the United States is surely better than another published in French. On the contrary, I think is more accurate that it's easy to lie when there is no one around to contradict, as the saying goes. For example, I know of studies about Quebec written in English and published in Australia that are incorrect. However, since the papers were written in English and published abroad, they are considered to be better.

Mr. Maxime Blanchette-Joncas: Do you have any other suggestions for us, to ensure a francophone presence in scientific research and publication?

Mr. Yves Gingras: You keep saying "publication". You know that in my opinion, in science, the question of publication has been settled. In the case of teaching, however, professors hired at francophone universities must give courses in French. If a student pays tuition fees to a francophone university but their chemistry or physics course is taught in English, that is a false representation. In that case, they might just as well have gone to an anglophone university.

Mr. Maxime Blanchette-Joncas: To conclude, I would like to hear your opinion about international relations, particularly with the francophone countries. Is there potential for us to transmit franco-phone scientific knowledge?

Mr. Yves Gingras: I believe that is the case. If we ask researchers in the social sciences and humanities whether they publish in the journals, we have to analyze, sociologically and empiri-

cally, what the people themselves do. Personally, I publish papers in both French journals and Quebec journals, for example. The rules of reviewing have to be modified accordingly, because that is the basis on which grants are awarded. We must not forget that the researcher himself is plugged in internationally. In other words, they speak French when they are in Paris and they speak English when they are in Toronto, and that seems to me to be a normal dynamic.

Mr. Maxime Blanchette-Joncas: Thank you.

[English]

The Chair: Thank you, Professor Gingras.

Thank you, Mr. Blanchette-Joncas.

It's now my honour to say thank you to both of you. Thank you for coming tonight. I think everyone really appreciated your very interesting testimony. I hope that it's been a good experience for both of you, and I hope you will want to come back. We thank you very much.

Dear colleagues, with that, we are going to suspend while we get ready for our third and last panel.

• (2030)

(Pause)

• (2040)

The Chair: Thank you, everybody. I apologize for the delay.

I call this meeting back to order.

We are on our last panel of the evening.

I would like to thank our witnesses. It is very gracious of you to share your expertise and to come on Halloween.

[Translation]

I would like to make a few comments for the benefit of the new witnesses.

Wait for me to call your name before speaking. If you are participating by videoconference, click on the microphone icon to activate your mic, and please put yourself on mute when you are not speaking.

Regarding the interpretation, those who are participating in the meeting via Zoom may choose, at the bottom of the screen, between Floor, English and French; those who are in the room may use the headset and select the desired channel.

I would remind you that all remarks by members and witnesses must be addressed to the chair.

• (2045)

[English]

I'd now like to welcome our witnesses.

We are very fortunate tonight to have, from the Department of Industry, ISED—Innovation, Science and Economic Development Canada—Nipun Vats, the assistant deputy minister, science and research sector; and from the Social Sciences and Humanities Research Council, we have Valérie La Traverse, vice-president, corporate affairs.

We'd like to welcome you both. You will each have five minutes to present. At the four and a half minute mark, I will hold up this pink card so that you know you have 30 seconds. We aim to be fair to everyone.

With that, Dr. Vats, we look forward to your—

[Translation]

Mr. Maxime Blanchette-Joncas: If I may interrupt you, Madam Chair, with your permission, I would like to check whether it is possible to extend the meeting this evening by 10 or 15 minutes, to make up the time we lost because of technical difficulties.

[English]

The Chair: I will check with our clerk, Monsieur Blanchette-Joncas. I believe we have to finish at 9:30, but I will check with our clerk.

It's my understanding that we can extend. Would 10 minutes be appropriate, Monsieur Blanchette-Joncas?

[Translation]

Mr. Maxime Blanchette-Joncas: Let's make it 10 minutes, Madam Chair. Thank you.

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

[English]

Thank you very much, and thank you to everyone who will be gracious in giving their time.

We will begin with Dr. Vats for five minutes, please.

Dr. Nipun Vats (Assistant Deputy Minister, Science and Research Sector, Department of Industry): Thank you very much, Madam Chair.

[Translation]

I would like to thank the committee members for the invitation. I am pleased to be here with you today to testify.

I will take this opportunity to introduce, virtually, my colleague Valérie La Traverse, vice-president, corporate affairs, at the Social Sciences and Humanities Research Council. I know the committee has already heard testimony from representatives of the Natural Sciences and Engineering Research Council on this subject. I hope the Committee will find it useful to get an overview of the issue, because we work in collaboration with the other funding council on this subject as we do on a number of others.

I would like to start by giving you an overview of science and research in Canada and then discuss research and scientific publication in French.

[English]

As the global economy changes, Canada has all the ingredients needed to thrive. To support and protect Canadian research and science, the government has made total investments since 2016 of more than \$14 billion. These investments are helping to cement Canada's position as a world leader in research and innovation and are building a global brand that will attract talent and capital for years to come.

Our workforce is one of the most educated in the world. We have world-class research institutions from which half a million students graduate each year. That places us as having the highest share of university or college graduates among OECD countries. We should also be proud of our scientific community. Despite representing just half a per cent of the global population, Canada generates more than 4% of global knowledge.

World-class research is made possible through domestic and international partnerships, including collaborations between researchers, companies and research institutions. We are committed to preserving a collaborative and open approach to science and discovery, while at the same time protecting Canadian research and intellectual property against foreign interference, espionage and theft.

To help ensure that investments in innovation, science and research maximize benefits to Canadians, the government's 2022 budget also provided funding for the implementation of the national security guidelines for research partnerships.

In sum, there is a range of building blocks necessary to build a strong economy and a secure, collaborative research system.

[Translation]

On the subject of this meeting, research and scientific publication in French, it is essential that we treat our two official languages equitably in order to allow the entire extent of the excellence in research at Canadian postsecondary institutions to be known. At Innovation, Science and Economic Development Canada and the research funding agencies in the portfolio, that is, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council, we ensure that our programs are harmonized with the government's objectives in key areas, including promoting equity, diversity and inclusion, and aligning with the policies and laws governing the official languages and scientific publications.

While the department does not fund or directly coordinate scientific publications and journals, it provides funds through contribution agreements with independent third party agencies that are engaged in funding and carrying out research and training and in promoting the sciences.

In order to promote the official languages, these contribution agreements require that the recipient body deliver its communications and services in both official languages and contribute to guaranteeing harmonization with the policies and obligations of the Government of Canada under the Official Languages Act.

For example, the Council of Canadian Academies, which is funded in part by the department, publishes its project summaries and full reports in both official languages on its website, making this research accessible to everyone.

• (2050)

[*English*]

Within ISED itself, the communications research centre, CRC, regularly publishes its research findings in online academic journals such as IEEE, the Institute of Electrical and Electronics Engineers, and Springer. The CRC website provides a link to these journal articles found on a third party website, along with abstracts. Along with this, the CRC ensures that the abstracts on the CRC website are available in both English and French. In addition to research publications, the CRC also has research-related stories and videos in both English and French on its website.

[*Translation*]

As the principle funders of research and associated training, the granting councils adhere to the relevant policies and laws that govern official languages and publishing. They have the systems, processes, personnel and capacity they need to thoroughly evaluate the scientific merit of an application, whether it is written in French or in English.

[*English*]

Maybe I'll just note here that you've already heard from my colleague Marc Fortin, from NSERC, about the success of French applications for NSERC competitions, and I think Valérie will speak a bit to you on SSHRC's core programs, which have success rates similar to or better than applications submitted in English for the talent grants, insight grants and partnership grants.

In the interest of time, Madam Chair, I'm wondering how much time is left.

The Chair: Dr. Vats, I'm sorry. That is the time, but I know the committee is keen to ask questions and, hopefully, you'll be able to get more testimony shared with them then.

Thank you, Dr. Vats.

Now we will go to Madame La Traverse for five minutes, please.

[*Translation*]

Ms. Valérie La Traverse (Vice-President, Corporate Affairs, Social Sciences and Humanities Research Council): Good evening, everyone.

I am Valérie La Traverse, vice-president, corporate affairs, at the Social Sciences and Humanities Research Council, or SSHRC. I am responsible for policy, strategy, performance, evaluation, audit and international relations at SSHRC

Thank you for the opportunity to speak to you today about SSHRC's efforts to support French-language research and publishing. Thank you as well for your leadership on research and science in Canada.

As many of you know, SSHRC is the federal research funding agency that promotes and supports research and research training in the social sciences and humanities in Canada. SSHRC also admin-

isters interagency programs on behalf of the three federal research funding agencies: the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council and SSHRC. These interagency programs include amongst others the Canada Research Chairs Program, the Canada First Research Excellence Fund and the New Frontiers in Research Fund.

[*English*]

Canadian social sciences and humanities research is helping address some of the most critical challenges we face as a society, domestically and globally, be it pandemic recovery, economic growth, environmental sustainability, affordable housing or reconciliation.

Fundamentally, it's about building a sustainable, just and prosperous society.

• (2055)

[*Translation*]

SSHRC has a genuine interest in supporting Canadian research in both official languages. As a federal entity, SSHRC must, of course, comply with Canada's official languages legislation. But it is more than an obligation, as SSHRC is committed to increasing the impact of Canadian social sciences and humanities research conducted and published in French.

It is indeed essential to connect with and capitalize on the wealth of ideas and knowledge produced in French, to increase the pool of solutions to pressing global issues that concern us all.

As you know, research and scholarship are increasingly interdisciplinary and collaborative, both here and abroad. That is why it is so important that the researchers we fund be able to participate fully in international collaborations in both English and French.

[*English*]

Looking broadly at Canada in the global context, linguistic duality is an asset for Canada and the Canadian research system. It allows SSHRC, the Social Sciences and Humanities Research Council, to assess and fund research and research training in both official languages, strengthening the research enterprise, opening larger horizons and increasing solutions that contribute to building the Canada and world we want for today and tomorrow.

Looking more regionally within Canada, we see how important it is for official-language minority communities to have access to a local, regional post-secondary institution operating in the minority language. We realize that, for francophone communities outside Quebec, these institutions—often small in size—have a huge impact on the vitality of the community as an employer, for education and skills development, for local innovation and as a community hub.

SSHRC is pleased to support these communities through both institutional and individual grants for research, research training and knowledge mobilization.

[*Translation*]

I have been working in the public service for over 20 years, and I am truly impressed by the strength of SSHRC's workforce, which is very bilingual, and by the organizational culture, which is also very bilingual. Thanks to this, our activities are thought out in both languages and take into account linguistic duality.

In conclusion, at SSHRC we are always looking for international best practices and challenges facing the Francophone research community in Canada, to ensure greater equity in the funding and dissemination of research in French.

Thank you.

[*English*]

The Chair: Thank you to both witnesses. We're really grateful for your time this evening.

I believe that, tonight, we're beginning with Mr. Mazier for six minutes.

The floor is yours.

Mr. Dan Mazier (Dauphin—Swan River—Neepawa, CPC): Thank you, Madam Chair.

This question is for Madame La Traverse.

Canada is not the only bilingual country in the world. There are many countries that have even more official languages than Canada. Is there any research or analysis on how these countries have dealt with this matter?

Ms. Valérie La Traverse: I don't have the evidence in front of me.

We fund quite a bit of research at SSHRC that is focused on the French language and bilingualism. We'd be happy to share some of the research we've funded on that topic. It's also important for us to connect internationally to communities that have a bilingual nature, as well. Yes, we do fund research of that nature and I'm happy to follow up with some specific examples.

Mr. Dan Mazier: Yes, if you could provide the committee with that research, that would be fantastic.

Is there an international language being used for publications around the world?

• (2100)

Ms. Valérie La Traverse: I would say that English is the predominant language in the social sciences and humanities.

Mr. Dan Mazier: Okay. Thank you.

Do you think Canada is on track to becoming a destination of choice for francophone researchers and post-secondary students?

Ms. Valérie La Traverse: I would absolutely say so, and I would say that the bilingualism of our country is an asset. As I mentioned in my opening remarks, I am responsible for international relations. When we do meet with international counterparts such

as Switzerland, France—and we recently met with the Wallonia region in Belgium—Canada is definitely seen as a leader, not only in French-language research but as a bilingual country. Yes, I would say we're on track.

Mr. Dan Mazier: Excellent.

Dr. Vats, do you think the lack of publishing opportunities prevents innovative discoveries by francophone researchers?

Dr. Nipun Vats: What I would say is that I don't have any empirical evidence to that effect. I think it's important that researchers be able to connect with one another as effectively as possible. In some domains the lingua franca of research is English, and in others it varies depending on the nature of the research. That connectivity is actually what promotes innovation, so I think having that ability in Canada to move across two languages actually just strengthens our ability to explore domains of research that may otherwise be a little more challenging to access.

Mr. Dan Mazier: Thank you.

Madame La Traverse, do you have anything to add to that?

Ms. Valérie La Traverse: No, I do not.

Mr. Dan Mazier: Okay.

The next question is for you.

In your experience, do French and English publications receive the same amount of recognition, or are there any advantages associated with anglophone publications and research?

Ms. Valérie La Traverse: I have to say I have a short-lived experience in this, so I will defer the question to my colleague. I joined SSHRC a year ago and I have worked with the scientific community across all disciplines, but I couldn't say that I have a particular opinion on that question.

Mr. Dan Mazier: You've never noticed a difference between French or English publications as far as the acceptance of them is concerned.

Ms. Valérie La Traverse: Could you repeat the question?

Mr. Dan Mazier: In your experience, do French and English publications receive the same amount of recognition? Are there any advantages associated with anglophone publications and research?

Ms. Valérie La Traverse: I would say that if you're in a French community and you're published in a certain publication, you would have probably the same respect as if you were an anglophone publishing in a well-known publication in English, so I wouldn't see any difference. I think it just depends on the community in which you operate and in which you publish.

Mr. Dan Mazier: Excellent. Thank you.

That's all I have, Chair.

The Chair: Thank you so much, Mr. Mazier. We've so glad you've joined us. Welcome.

With that, we will go to Mr. Collins, for six minutes, please.

Mr. Chad Collins: Thanks, Madam Chair.

Thanks to the witnesses for attending this evening.

Dr. Vats, we've heard from many witnesses throughout the study that there is a whole host of supports for French research obviously in the province of Quebec, and that should come as no surprise to anyone. However, we also know and we've heard that there is French research that is conducted outside of the province and there can be challenges and barriers faced by individual researchers or organizations that are looking to support French publications.

Do you have any recommendations as to how the government can assist and supplement maybe provincial and/or post-secondary programs that might exist outside the province of Quebec?

Dr. Nipun Vats: Thank you for the question.

I guess, at a very basic level, the publication costs for those journals that actually require you to pay for publication costs are an eligible expense under grants from the granting council, so there is that level of support.

The other thing is that, when it comes to peer-review processes for grant awards, I think there isn't a really strong attempt to ensure there is a level playing field between the two languages, and that's borne out by some of the statistics around the success rates, although, granted, a smaller proportion generally of francophone researchers actually submit their applications in French than would be the case if you were going by population share. There may be something to look at in that.

Outside the province of Quebec, there are institutions that are either bilingual or francophone in nature, and they provide supports to their researchers. Beyond that, there are other opportunities for publication, like open access types of publications that allow for publications to be provided in either official language. They also are an effective way of disseminating materials.

There are a range of supports. I don't think there's a single magic solution to the problem, but I think when it comes to the actual financial support that's provided through federal government programming, the efforts are to try to ensure that merit does not discount one language versus the other.

• (2105)

Mr. Chad Collins: Thank you for that.

As a supplemental to that, first I'll go to what you submitted earlier. You talked about requiring organizations to conform with the policies under the Official Languages Act, you talked about a level playing field just now, and you've used other language that talks about ensuring equitable treatment of both languages. I think some of the witnesses we've heard today have talked about the challenges and barriers they face when submitting grant applications. In the context of those constructive criticisms that the committee has heard, what changes have been made over the last number of years to create the environment that you opened with, as it relates to creating that level playing field?

There seems to be some disagreement from those who are submitting grants that it may not be level today, as we speak and as we undertake this study. What would you argue in defence, in terms of the changes that have been made over the years that try to create the environment that you've presented here this evening?

Dr. Nipun Vats: One important change that's happened is that assessment boards are trained in issues related to systemic bias. There is, much more than, say, 10 years ago, a level of understanding and a required training in the case of many boards, and certainly within all the governance committees at the councils, that requires you to understand how you can bring your biases to the table, which may be with respect to gender, race or linguistic issues, and try to get over those types of issues.

The other part of it is in terms of recruitment. I don't have a time series of statistics on recruitment when it comes to reviewers of grant applications, but certainly today the share of reviewers on review committees for grant applications, generally speaking, either meet or exceed the share of applications. In fact, I think in many cases it's about a quarter, so it's representative of the population. In so doing, you're ensuring that, when you have a peer-review committee that's assessing the quality of an application, a significant fraction of those reviewers are equipped to review it in that language, which means that applications in either official language are getting a fair shake, if you will.

Mr. Chad Collins: Thanks.

I have a supplemental to that, if I have time.

Dr. Vats, on EDI training, is it mandatory for those who are reviewing the applications? Is it policy for anyone who's in receipt of a grant application and is reviewing those applications to undertake EDI training to get at that systemic bias prior to going through that process, or is it optional for those people who...?

Dr. Nipun Vats: I would defer to the councils to confirm this, but I know that certainly for the governance committees that review the integrity of the processes, it is required. I can say that with authority, because I'm on some of those committees. I know that at least in the case of some of the large programs with large awards, there's not only systemic bias training, but there are often subcommittees of the peer-review committee that are actually focused on issues of equity. There are multiple layers to this, but when it comes to whether it's required across the board for all review committees, I think I might have to turn to my colleagues at the councils to confirm.

• (2110)

The Chair: Thank you very much, Mr. Collins.

To our witnesses again, we are grateful for your being here.

We will now go to Monsieur Blanchette-Joncas for six minutes.

[Translation]

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

I would like to welcome the witnesses who are joining us for the third hour.

Mr. Vats, does your department recognize that scientific publishing in French in Canada is in free fall at present?

Dr. Nipun Vats: You did say "in free fall"?

Mr. Maxime Blanchette-Joncas: Exactly.

Dr. Nipun Vats: I don't understand what that means.

Mr. Maxime Blanchette-Joncas: "In free fall" means that there is a decline in research and scientific publication in French.

Dr. Nipun Vats: I'm sorry, I haven't seen those figures and I'm not familiar with this.

Mr. Maxime Blanchette-Joncas: Right. I would ask your department to send us an answer on that point.

I am going to provide you with some data, since you are not familiar with it. Between 1980 and 2014, publishing in French in the natural and medical sciences declined by 25 per cent. A decline has also been observed in the social sciences and humanities, of about 20 per cent over the last 40 years.

You talked about equitable treatment for the two official languages. Can you provide us with the funding data you have? Is it proportional and equitable as between the two official languages, French and English, in the granting agencies?

Dr. Nipun Vats: I have some statistics here that I could give you, if I can find them. I don't know whether Ms. La Traverse might have some of her own.

Mr. Maxime Blanchette-Joncas: You can just tell us whether you have observed a trend.

At present, is funding between French and English equitable, for scientific research in Canada?

Dr. Nipun Vats: I think so. I find that the average success rate for applications in French is approximately equal or even better, in some cases, than the rate for applications in English. It depends on the number of applications submitted in the two languages.

Mr. Maxime Blanchette-Joncas: As you say, the success rate is not necessarily a figure to base a determination on, since the percentage of applications in French is far from sky high. It is practically nonexistent, even, for some granting agencies: only ten per cent of applications submitted to the Natural Sciences and Engineering Research Council of Canada are made in French.

What is your department doing to reverse that decline?

Dr. Nipun Vats: If I may, I am going to answer in English, because it will be easier for me. I apologize. Sometimes, it is a bit difficult for me to manage in French on certain subjects, like this one.

[English]

The language of publication or language of application is somewhat reflective of the language of work in a discipline as well. I would like to hope, although I don't have evidence to this effect, that applicants who are francophone, if they choose to apply in English, it's reflective of the fact that their work environment, when it comes to communication of scientific knowledge, is more in English than in French. This may be the nature of certain disciplines of research.

To be honest, I don't have enough detailed data to be able to validate that. I can certainly say that when it comes to the natural sciences and engineering disciplines, the vast majority of research communication is done in English. It may be the case that this influences the choice of language of the application itself. Again, that is not based on analysis.

[Translation]

Mr. Maxime Blanchette-Joncas: Thank you, Mr. Vats. I'm going to try to ask you more precise questions. You can share your data with us then.

I want to come back to funding applications received by the granting agencies. I am trying to learn whether there is an imbalance when it comes to the proportions in French and English, not for the success rate, but for the amounts awarded for each official language. Can you provide us with the relevant data covering the last 20 years?

I also want to talk about the share of research funding that is allocated to francophone and anglophone universities, not just in Quebec, but also in francophone minority communities. Have you noticed a trend develop in the last 20 years? I would like an answer from your department on that subject.

I want to come back to the example of the Natural Sciences and Engineering Research Council of Canada. The fact is that 50 per cent of francophones in Canada decide to submit an application in English. Has your department observed this? What measures and mechanisms have been put in place by your department to encourage francophones by enabling them to submit their applications in their language and do research and publish in the official language of their choice?

• (2115)

[English]

Dr. Nipun Vats: When it comes to the data, I think our colleagues at NSERC and SSHRC would be well positioned to provide it. I don't know if you have the full time series of data, but they would be well placed to provide that. The ministry itself doesn't actually hold that information. It would be with the councils. I don't want to speak for my colleagues, but to the extent that it's available, I think they would be able to share that.

On your question in terms of the actions to support applications in both official languages, I think the councils have made a real effort to ensure that, when it comes to peer review, there is a linguistic representation on review committees that tries to ensure the assessment is equitable in both languages. Whether that needs to be better communicated is another question, to ensure that people are not choosing to apply in English because of a concern that this is not the case—

The Chair: I'm sorry to interrupt.

Thank you, Monsieur Blanchette-Joncas.

Again, I really want to thank our witnesses, who are so gracious with their time.

We will go to Mr. Cannings for six minutes, please.

Mr. Richard Cannings: Thank you.

Thank you to both witnesses.

I want to follow up on some of the questions Monsieur Blanchette-Joncas was asking, perhaps with Ms. La Traverse of SSHRC.

We've heard from NSERC. Monsieur Fortin gave us an example. I think it was that 26% of applicants were francophone, but only 10% of the applications were in French. He gave some data, which I think was restricted to McGill and the University of Ottawa, that the French applications there for NSERC had greater success than the English applications.

I'm wondering if SSHRC has similar data. Maybe you're not aware of the exact numbers today, but perhaps we could get a written answer in the near future from SSHRC for those data. What is the proportion of applications to SSHRC from francophones, how many are presented in French and how many are in English proportionately, and what is the success rate of those different applications, French versus English? Is that something we could get for the committee?

Ms. Valérie La Traverse: Yes, absolutely. I could tell you that for the last 10 years the application rates in French for all our programs range from 15% to 19%, and it really depends on the particular program or financing opportunity. Those numbers have been quite steady over the last 10 years.

In terms of the award rate for applications in French, again we've seen that they've been quite steady. It ranges from 14% to 26%, again, depending on the funding opportunity. We tend to have a higher award rate for our partnership programs, but that could be due to a number of factors. All that is to say that it's been quite steady over the last 10 years. We haven't really seen a lot of dips or any free-falling, as was referred to earlier.

I would also say that in the year 2021-22, and I'd invite.... I'm happy to provide you with our report on competitions, but we actually saw a higher success rate in the aggregate among French applicants last year. Again, we do an evaluation, a review and a report every year on all our competitions, broken down by funding opportunity, programs, language and French language, so I think you'd find that quite interesting.

• (2120)

Mr. Richard Cannings: You also mentioned some of the cross—I don't know what the term would be—initiatives like Canada research chairs and new frontiers, which were shared among the councils. Can you perhaps comment on the issues of, say, a francophone applying for those positions or funding for those projects, and what the processes are to make sure that process is fair?

Ms. Valérie La Traverse: I would say that, because outside of Quebec a lot of the francophone institutions tend to be smaller institutions, we have a number of measures put in place to ensure equity. We have an institutional grant that universities receive. We al-

so have a method of calculation under a research support fund, which is the fund for all indirect costs, for a formula that is actually favourable to smaller institutions. Smaller institutions would get a higher percentage of their indirect costs funded through the research support fund. We also have an allocation of chairs reserved for small institutions across Canada through the Canada research chairs program.

Just to give you an example, there are 10 French-language minority institutions across Canada that have Canada research chairs, and there are 66 active Canada research chairs in those 10 institutions. We also have six special Canada research chairs that are really targeted to those small institutions. The total investment for those chairs in those institutions for French-language minority institutions is \$62 million.

Mr. Richard Cannings: Thank you.

Madam Chair, I'll cede the rest of my time, if there is any.

The Chair: Thank you so much, Mr. Cannings.

With that, I will confirm with the Conservative Party that we are going back to Mr. Blanchette-Joncas.

Mr. Corey Tochor: That's correct.

The Chair: Thank you so much, Mr. Tochor.

Mr. Blanchette-Joncas, the floor is yours for five minutes.

[*Translation*]

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

Mr. Vats, in November 2021, the Government of Quebec announced that it would provide financial support for creating a new service to assist research in French, a recommendation that had been made by Acfas. That service will be offered to francophones across Canada.

The request for funding was also sent to the federal government. Will the federal government contribute to funding the service to assist research in French?

[*English*]

Dr. Nipun Vats: I'm not aware of any commitment to do so.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Would it be possible to get an answer from your department, Mr. Vats?

[*English*]

Dr. Nipun Vats: Certainly. We could do that. I will say that we have provided support to Acfas activities, but with respect to that specific initiative, I don't have that information.

[*Translation*]

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

Several witnesses we have heard at the committee's recent meetings presented concrete, realistic suggestions to counteract the decline in French in research and scientific publication in Canada.

Has your department previously considered implementing certain measures to promote research and scientific publication in French?

[English]

Dr. Nipun Vats: I don't think we've looked at specific measures in that regard. I think we've focused a lot on the range of issues around ensuring equitable review. We generally don't, except through the grants that are provided through the councils, fund publication in either official language, so we don't normally have such a policy.

Madame La Traverse might have specifics on whether there are any such programs within SSHRC, but as a general policy, we don't have any specific funding in that regard.

● (2125)

[Translation]

Mr. Maxime Blanchette-Joncas: To be sure we understand, Mr. Vats, are there criteria in granting your funding designed to promote or increase the presence of French in research and scientific publication in Canada?

[English]

Dr. Nipun Vats: I don't believe there's anything specific to that effect.

[Translation]

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

Ms. La Traverse, I have taken a look at your impressive professional career, one of your accomplishments being to develop international expertise at Global Affairs Canada.

Based on your experience, how would you assess the role that Canada can play as a scientific leader within the global francophone community?

Ms. Valérie La Traverse: I think we have a very good opportunity to demonstrate leadership within the global francophone community. As I said earlier, the fact that we are a bilingual country with francophone strength in the sciences presents a good opportunity to develop collaborations in that regard.

We are currently developing an international approach. As I said earlier, we are in talks with Switzerland, Belgium and France. We are also developing collaborations in Africa...

Mr. Maxime Blanchette-Joncas: Forgive me for interrupting you, Ms. La Traverse, but time is flying.

You say you are currently developing an approach. Does that mean that there is no strategy within the government at present to extend the influence of French as a scientific language globally?

Ms. Valérie La Traverse: There may be a strategy at Global Affairs Canada, where I worked. At present, we are collaborating very actively with the members of the Francophonie. At the SSHRC, however, we have always worked very closely with France...

Mr. Maxime Blanchette-Joncas: To your knowledge, is there a strategic plan at the SSHRC, or even at Innovation, Science and Economic Development Canada?

Ms. Valérie La Traverse: I am not aware of a strategy, properly speaking, but...

Mr. Maxime Blanchette-Joncas: I would appreciate it if you would provide us with a more detailed answer from the department.

A few moments ago, I presented data collected by the Canada Research Chair in the transformations of scholarly communication that showed that between 1980 and 2014 there was a 25.6 per cent decline in scientific publishing in French in the social sciences and humanities.

Do you consider that decline to be a free fall or a normal decrease?

Ms. Valérie La Traverse: I'm sorry, I would have to have the information in front of me to answer you.

That said, at the SSHRC we support the aid to scholarly journals program and we give out the awards to scholarly publications. We also have a partnership with the Érudit platform, as you heard earlier.

So I was not entirely aware of the free fall you're talking about, because we do everything we can to support assistance to scientific publishing in French in Canada.

Mr. Maxime Blanchette-Joncas: Thank you, Ms. La Traverse.

I am going to come back...

[English]

The Chair: Thank you very much, Monsieur Blanchette-Joncas.

Thank you to our witnesses.

We will now go to Ms. Diab for five minutes.

Ms. Lena Metlege Diab: Thank you very much, Madam Chair.

Welcome to both of our witnesses. It's a very interesting panel. Thank you very much for being here.

I was very interested to hear from you, Madame La Traverse.

One of my questions was about institutions outside Quebec that are francophone in a French-language minority setting—Université Sainte-Anne in Nova Scotia, for example. I want to speak to you about the challenges researchers there have, as well as the institutions themselves. I want to ask what, if anything, your organization does to help those researchers and institutions.

• (2130)

Ms. Valérie La Traverse: As I mentioned, we have institutional grants for universities. We have supplements for smaller universities, which tend to be the francophone universities you're speaking about. We also, through our research support fund—as I mentioned earlier—have a calculation in which we provide, potentially, a higher proportion of indirect costs to those institutions.

I might add that those institutional grants can be used to support research activities in those universities. The university could choose to use that institutional grant—the funds—to promote French-language research in their institution.

I would also say that we're very active in terms of outreach. Our president visits these universities frequently—obviously, not during COVID. However, we are there. We go and listen. As I mentioned in my opening remarks, SSHRC, as an organization, believes in the bilingual character of our country. We make it a point to visit those institutions in order to understand what their concerns might be.

Dr. Vats referred to this earlier, and I didn't have an opportunity to say it: I would also add that 25% of our reviewers correspond in French in our merit review committees. That's quite an important figure. We also ask that all merit reviewers have bilingual capacity.

I hope that answers your question in terms of the support we provide for those minority-language institutions outside Quebec.

Ms. Lena Metlege Diab: Yes, thank you very much.

Mr. Vats, I have a question. You started your discussion by saying that the total investments the government has made since 2016 have been \$14 billion. You also talked about the connection between researchers, companies, institutions and government.

Can you elaborate a little bit more on that? Tell me where you see government playing a bigger role or an additional role in helping researchers publish in French vis-à-vis the institutions or even private enterprise, for that matter.

Dr. Nipun Vats: There are a number of layers to that.

At one level, a lot of what we're doing, in addition to supporting investigator-led, inquiry-based research, is also on the other end of it, trying to better connect the outputs of research to society and to the economy. That's done through some of the programs that have been developed through the councils. It's also done through some of the programs through ISED that try to promote innovations moving from the lab to the marketplace. Those sorts of business supports are provided in both official languages.

There's an effort to try to connect researchers across the country to companies across the country wherever the strengths may be, and a lot of our programs try to take that national platform approach.

I see that the chair has signalled time. I don't know if I have time to finish the answer.

The Chair: There are another 10 seconds, Dr. Vats.

Dr. Nipun Vats: Just as an observation, I think the more that you can connect knowledge.... The knowledge mobilization in both official languages is very effective. Enhancing the connections between researchers who work in English and who work in French means

that there's a greater appreciation of the connections between what they do, and those synergies do pay off, so I think—

The Chair: Thank you, Dr. Vats.

Thank you, Ms. Diab.

We will now go to Monsieur Blanchette-Joncas for two and a half minutes, please.

[*Translation*]

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

Mr. Vats, some witnesses have told us there has been a loss of confidence in the granting agencies when it comes to submitting an application in French. I will give you the figures: from five per cent to 12 per cent of funding applications are written in French, while French-speaking researchers represent about 21 per cent of the community.

Have you observed this imbalance at the granting agencies?

• (2135)

[*English*]

Dr. Nipun Vats: Yes, I think I have observed that there's a difference. As for what the reason for that difference is, unfortunately, we don't have enough evidence to assess what the cause is.

I think there's better data now being collected with respect to not only the language of the application but the official language the individual who's applying identifies with. I think we will get better data on this. The numbers on the face if it don't sound very good, but it's hard to draw conclusions without digging more deeply into what the meaning of that is.

[*Translation*]

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

I understand it is hard to draw conclusions, and that makes it even harder to propose solutions.

Can you provide the committee with the data on the percentage of applications filed in French as compared to the applications filed in English, for all three granting agencies, in the last 20 years?

Dr. Nipun Vats: I don't know whether it is available for a 20-year period, but I could put the question to my colleagues in the granting agencies for you.

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

It has been observed that federal funding for anglophone universities rose steadily. It went from 34.5 per cent to 38.4 per cent, while English mother tongue anglophones account for eight per cent of the Quebec population.

In your department, has it been observed that federal funding for anglophone universities in the province is causing anglicization to rise, particularly in research and scientific publication, when the official language of Quebec is French?

[*English*]

Dr. Nipun Vats: I don't have those statistics offhand. Just to clarify, according to those numbers, is that the share of research that's done in anglophone institutions, or is that the share of research that's done in English?

The Chair: Monsieur Blanchette-Joncas, perhaps you would like to ask for a written answer.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Mr. Vats, I would ask you to send us a written answer to that question.

Thank you.

[*English*]

The Chair: Thank you so much, Monsieur Blanchette-Joncas.

For the last two and a half minutes—and our witnesses have been so kind in staying this extra time—we will go to Mr. Cannings.

Mr. Richard Cannings: Madam Chair, considering the late hour, I will simply pass on that and say thank you to all.

The Chair: Thank you, Mr. Cannings. That's very kind.

I would like to thank our witnesses. It's a late night. You have been very kind with your time and your expertise. We hope you have had a pleasant time and that you will want to come back again.

I would like to thank our clerk, our analysts, our interpreters and everyone who supports this committee and who has stayed late tonight.

Mr. Dan Mazier: I have a point of order, Madam Chair.

Just before we dismiss for the night, through you, Madam Chair, I would like to get an update on our digital binder for the next study, the moon shot study. In particular, a notice of motion needs to be posted and the witness list, please, if that could be updated. I guess the clerk would do that.

The Chair: Thank you, Mr. Mazier. I will pass it to our excellent clerk.

Mr. Dan Mazier: Thank you. Have a good night.

The Clerk: I think the room is getting up from the table, so....

The Chair: Okay. I see that. I think Mr. Mazier was just asking for an update.

With that, dear colleagues, I will say thank you to you all. Happy Halloween.

The meeting is adjourned.

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