

Office of the Chief Science Advisor Gouvernement du Canada

Bureau de la Conseillère scientifique en chef

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Letter sent by email to: SRSR@parl.gc.ca

Mr. Keelan Buck Clerk of the Standing Committee on Science and Research House of Commons 131 Queen Street, sixth floor Ottawa, Ontario K1A 0A6

Dear Sir:

I would like to thank the Standing Committee on Science and Research for seeking my opinion on some of their topics of study. The Committee members and I share a similar interest in developing Canada's research capacity, fostering science literacy and disseminating knowledge within our society.

The issue of the language to be used in science and to disseminate scientific knowledge is both important and complex not only for Canada, but also for all countries that do not have English as a common language. As a starting point, let us review the questions asked by MP Maxime Blanchette-Joncas:

Currently, French is virtually absent from the sciences in Canada. How can we think about mobilizing citizens and the public using science, if science is expressed in a language that doesn't reach a quarter of the population? How do we go about engaging and mobilizing a community if that community does not have direct access to the scientific documents in its common national language?

There is no better time than the International Francophonie Day to discuss the place of French in the world of research.

Although spoken by more than 300 million people worldwide, French is nonetheless losing ground against the predominance of English in disseminating scientific knowledge, particularly—but not exclusively—in natural sciences and life sciences. There is no simple solution to this challenge that has been common to all languages other than English for more than a half-century. In fact, although research teams often use the language of the country in which they are located, they still choose to publish their research findings in English in order to reach a maximum number of scientists around the world.

Moreover, the system for evaluating researchers includes a number of criteria related to the dissemination of their research findings, including the quality of the scientific journal in which their work appears as well as the number of times they have been cited by other researchers.



Since the major scientific journals are almost all published in English, there are few incentives to present work in another language. On the contrary, there could even be negative repercussions for not publishing in English.

It is therefore essential for Canada to maintain the vitality of French as a language of research, to facilitate access to knowledge expressed in French and to foster a civic dialogue in French in Canada and throughout the Francophonie. Given the global reality of science, consideration must be given to developing a series of intervention measures. In my opinion, the following are some measures that would be worth exploring:

- 1. Support scientific research in Francophone communities and encourage the setting up of networks of Francophone researchers across Canada and around the world. In order to do that, it would be necessary to set up a support program for scientific cooperation and researcher mobility between Canada and countries in the Francophonie. Just like culture and business, science deserves to have its place in Canada's relationships with countries in the international Francophonie.
- 2. Build on the activities of an existing organization, such as the Association canadiennefrançaise pour l'avancement des sciences (Acfas), that is operating nationwide to promote and encourage science in French (from the practice of science to the dissemination of scientific research findings).
- 3. Support the publication in French of plain-language scientific articles as well as journal articles that summarize the state of knowledge and can be used by both decision-makers and the general public. There have been such publications in the past, but they ceased publication because of a lack of funding. By using digital platforms to make dissemination easier, the government could work with the Acfas and other learned societies to develop sustainable options.
- 4. Develop sophisticated online tools to translate scientific articles from French to English and vice versa. This would encourage the publication of scientific articles in French and ensure that they are disseminated and used around the world. These tools would also give Francophones access to scientific articles published in other languages, including English. The power of artificial intelligence could be harnessed, and the government, through the National Research Council Canada or Library and Archives Canada, could support the development of such an application and make it available.
- 5. Set up a French-language science office to monitor and coordinate activities and measure progress achieved. This team could be set up within a Minister's office (the office of the Minister of Official Languages or that of the Minister of Innovation, Science and Industry) or attached to the Office of the Chief Science Advisor or the Canada Research Coordinating Committee. A French-language science office would propose concrete actions to be implemented by the principal organizations that manage and distribute federal funding for research. It could be a one-stop shop for all initiatives and programs that support science in French and make it available to everyone.

In closing, I acknowledge that these discussion points need to be further developed and validated through consultations with key players in the Canadian scientific research ecosystem.

Although the advocacy for and promotion of French in the practice of science is a topic that interests me personally, it is not an explicit component of the Chief Science Advisor of Canada's current mandate. It might be appropriate to consider making it a component in the future.

Yours sincerely,

Mona Nemer, C.M., C.Q., FRSC Chief Science Advisor of Canada