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The construction of the Covid-19 pandemic as a social problem: expert discourse and representational naturalization in the mass media during the first wave of the pandemic in Canada

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In this paper, we analyze the evolution of the expert discourse in the *media* during the first wave of the Covid-19 pandemic in Canada. From our analysis of 527 media products published by CBC/Radio Canada between January 1 and August 31, 2020, it was possible to document the type of expertise mobilized, the types of experts engaged by the media, the modalities of appropriation of this discourse by non-experts and the use of expert discourse by political actors. We organize our analysis around governmental measures that have generated more controversy and debate in the media (e.g., closing international borders) and that will be used to analyze the processes of representational naturalization (Negura and Plante, submitted).

We begin our chapter with an overview of the use of expertise in the Canadian public-health decision-making chain in the context of the Covid-19 pandemic by highlighting the tensions, contradictions, and paradoxes in political communication that this process revealed. We demonstrate the relevance of studying these dynamics reflected in the media from the perspective of social representations. A brief explanation of the research objectives, the data used and some methodological elements will follow. We then discuss the results of our analysis of the different stages of the evolution of the pandemic in Canada according to the expert discourse in the media. Finally, our analysis focuses on the role of expert discourse in determining what aspects of Covid-19 the public and the political authorities in Canada have defined as a social problem.

Keywords: covid-19, expert discourse, social representation, naturalization, social problem.

Introduction

In December 2019, the public in Canada learned of the appearance of a new virus in Wuhan, China. Political and health authorities soon afterwards mobilized experts to develop measures to deal with the potential threat. This new reality was also beginning to attract the attention of the media, which was calling on experts such as virologists and public-health professionals to help understand it. Both the journalists and political decision-makers have therefore been turning to experts to better understand and manage this new reality. It is therefore important to examine the role played by expert discourse in the way this new virus has been understood by both Canadian authorities and the public.

In this chapter, we wish to analyze the evolution of the expert discourse in the media during the first wave of the Covid-19 pandemic in Canada. We propose to document the type of expertise mobilized, the types of experts engaged by the media, the modalities of engagement with this discourse by non-experts and the use of expert discourse by political actors. We have organized our analysis around the events and government actions that have generated the most controversy and debate in the Canadian media.

However, our chapter goes beyond documentation to discuss the role of expert discourse in the construction of the Covid-19 pandemic as a social problem. For Colebatch, Hoppe and Noordegraaf (2010), the term "policy" refers to a conception of public policy that places the recognition of problems and their resolution at the center of government decisions. However, it is not clear how a situation comes to be defined as a public-policy problem. According to Blumer (1971), the recognition and definition of a specific social problem is less an objective phenomenon than a historically and socially situated process.

We therefore set out to analyze the definition of the social problem of the Covid-19 pandemic as a representational process.

Studies on the genesis of social representations are well known for examining the transformation of expert or scientific knowledge into common-sense knowledge (Moscovici, 2004). The processes of the representational genesis of Covid-19 have been already analyzed by many authors (Pizarro et al., 2020; Páez & Pérez, 2020; Apostolidis, Santos et Kalampalikis, 2020). In this book, the chapter co-authored by Rosa and Mannarini, in collaboration with researchers from 10 countries, has unveiled the emergence of polemical representations in different geo-cultural contexts. More modestly, we proposed to better understand the specific role of expert discourse and experts in the representational naturalization (Negura and Plante, 2021) of the Covid-19 pandemic as a new social reality. We hope to gain a better understanding of the process by which some situations associated with Covid-19 and acknowledged as harmful generated more government intervention than other situations in different regions of Canada and at different stages of the pandemic.

We will begin our chapter with an overview of the use of expertise in the public-health decision-making chain in Canada in the context of the Covid-19 pandemic by highlighting the tensions, contradictions and paradoxes in policy communications that this process revealed. We will demonstrate the relevance of studying these dynamics reflected in the media from the perspective of social representations. A brief explanation of the research objectives, the data used and some methodological aspects will follow. We will then discuss the results of our analysis of the evolution of expert media discourse during the pandemic in Canada. Finally, our analysis will focus on the role of expert discourse in

determining the aspects of Covid-19 that the Canadian public and political authorities have identified as a social problem.

The Covid-19 pandemic in Canada: The public-health decision-making structure and the actions of decision-makers

As Canada is a federation, some government-managed jurisdictions are separated between the provincial (10) and territorial (3) states and the federal government. This is the case for public health. At the federal level, the central agency, the Public Health Agency of Canada (PHAC), makes recommendations based on scientific advice from experts in various fields (PHAC, 2011). The agency is headed by a Chief Executive Officer (CEO), also known as the Chief Medical Officer. Dr. Theresa Tam has been in this position since June 26, 2017. During a crisis, the CEO can make recommendations to the federal government to guide decision-making.

However, the federal government's power to impose or relieve health measures is limited. The federal government can declare a state of health emergency, but this gives it only limited powers, for example, the closing of Canadian borders, managing the storage and faster supply of medical equipment and setting up emergency funds (Canada, 2020).

The Public Health Agency's recommendations and federal government decisions can be supported by the work of some government-affiliated research institutes that bring together different experts from across the country. These institutes may be associated with universities. The Canadian Institutes of Health Research¹ will, among other things, fund

¹ Canada's health research granting agency.

research in Canadian research centers and work with international institutions, such as the WHO, to arrive at the best recommendations based on the latest research (CIHR, 2020).

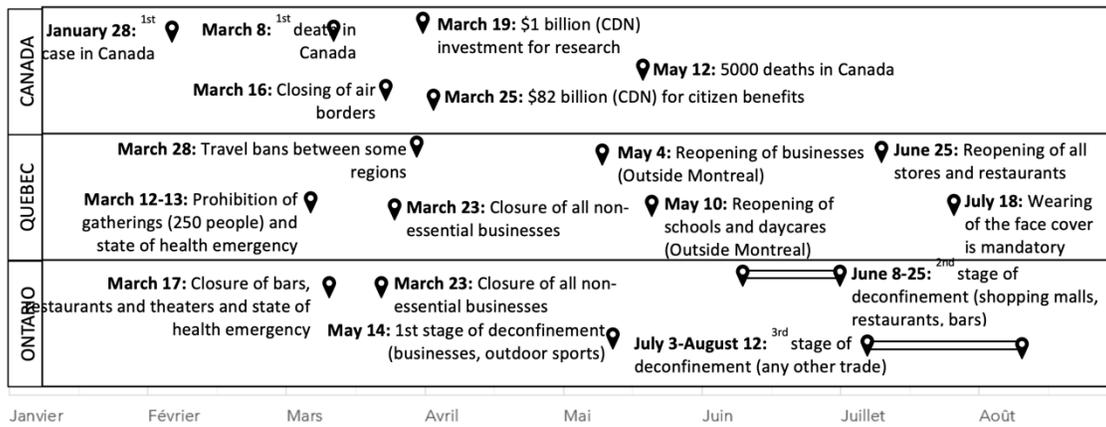
The most significant public-health decisions implemented during the Covid-19 pandemic came from provincial governments. Each Canadian province may decide, following the recommendations of different experts, what actions to take to deal with the pandemic within their jurisdiction. Provincial public health structures are similar to the federal structure. A Director of Public Health (also known as the Chief Medical Officer of Health) oversees the public-health recommendations that are issued to governments. Based on recommendations from research and academic institutes, laboratories and expert panels, governments can make decisions based on a variety of scientific evidence. However, it is the Director of Public Health who sets the tone for the recommendations and informs the public about the state of public health (CCNPPS, 2018). The provincial government, specifically the Prime Minister, remains the decision-maker.

On the provincial government side, their public-health jurisdiction allows them to declare a health emergency with more coercive measures. In particular, it allows provincial governments to prohibit access to certain places, to legislate the wearing of masks, to restrict home visits and to quickly establish contracts to obtain medical equipment. These decisions can be supported by public-health recommendations from both their own and federal governments.

The first Canadian case of Covid-19 was confirmed on January 28, 2020 in British Columbia, heralding the beginning of a major social change. The epidemiological situation and government measures to respond to the pandemic have evolved differently in each province. Among the important decisions that have been made in Canada, we note that

Quebec and Ontario, the two provinces with the highest number of cases in the country, have been subjected to several restrictive measures that we have summarized in Figure 1. Although public-health governments in Canada benefit from expert recommendations that allow them to make decisions based on a variety of scientific data, the measures taken by the provinces have diverged widely. For example, in British Columbia, the province that experienced the first case of Covid-19 in Canada, no large-scale lockdown has been imposed. Only restaurants, bars and some specific services were eventually forced to close. Gatherings of 50 or more people were also banned (British Columbia, 2020; The Canadian Press, 2020). In Quebec and Ontario, on the other hand, all businesses deemed non-essential were forced to close for several weeks.

Figure 1: Major events related to the Covid-19 pandemic, Canada, Quebec and Ontario, January-August 2020



By examining the expert discourse in the media, this chapter thus proposes to understand the role of that discourse in how the Covid-19 pandemic was understood and conceptualized by policy makers and the public in Canada during the first wave (January-August 2020).

Theoretical framework

We situated our analysis within the theoretical framework of social representations (Mocovici, 2001). Various reasons explain the relevance of using the theory of social representations for the study of the complex dynamics through which expert discourses, particularly those found in the media, participate in the definition of what constitutes a problem in relation to the Covid-19 pandemic and in decisions about public policies² to address that problem. Before coming to this point, however, it is important to explore the very notion of *public policy* and the role of experts in the development of government-action plans. Two distinct perspectives help to clarify the place occupied by expert discourse.

The first is closely concerned with the decisions made by governments, the forms that action plans take and their effects. From this perspective, the experts play the role of advisers and guides in the decisions. The policy is expected to be based on scientific knowledge relevant to the problem (Covid-19 or other) to which the *social policy* is intended to respond. This perspective is part of what Colebatch et al. (2010) call the paradigm of "authoritative instrumentalism:"

In the narrative of authoritative instrumentalism, governing happens when 'the government' recognizes problems and decides to do something about them; what it decides to do is called "policy". (Ibid. p.12)

This first understanding of the role of experts presupposes various elements, namely: 1) science is the truth upon which good decisions should be based; 2) the definition of the problem in question is already constituted, accepted and known, 3) the expert speaks in the

² The terms policies, public policies and action plans are used interchangeably and as synonyms.

name of "science," knows the truth about the problem (either because they have discovered it or because they have studied it) and transmits this truth to the politician, and 4) the politician applies this truth in a plan of action. Thus, this perspective is more interested in the effects of public policy (*outcomes*) than in the process and dynamics that may have guided its development.

This last point is rather the focus of the second perspective, which examines the role of expert discourse in the formation of public policy and in the definition of social problems. This perspective is part of a counter-narrative following the study of the "activity of policy making" (Colebatch et al., 2010, p.16; Fairclough and Fairclough, 2012; Blumer, 1971; Spector & Kitsuse, 1977). Indeed, experts then come to be regarded as social actors with an active role in the construction of social objects, including social problems (be it the Covid-19 pandemic or other problems). Their influence in the constitution of policies is dynamic. Moreover, this perspective emphasizes not the logical and rational aspect of political decision-making, but rather its uncertain aspects and its inherent contradictions and paradoxes (Fairclough and Fairclough, 2012; Debray, 1973).

In this process of the collective definition of a problem and the development of action plans, the influence of expert discourse is not negligible, according to some authors, even though it is not linear or unilateral. Indeed, it reflects the particular role of experts in the public policy development process, which Haas (1992) also refers to as "deference to the knowledge elite" (p.7). Indeed, faced with the uncertainty and complexity of issues, government actors are increasingly turning to specific groups of experts capable of proposing explanatory models of problems and, as a corollary, of formulating predictive hypotheses on the future developments of these models (Debray, 1973).

Various studies show that the decision-making process behind the implementation of social policies is eminently contextual and contingent, and that expert recommendations may or may not be incorporated into decisions. Farr (1993), for example, points out that there is a clear distinction between political action (adopting a policy) and the technological advances or scientific research that preceded and potentially influenced it. Haas (1992), from a more international perspective, also points out that both the findings and the recommendations of experts are far from always being consistently applied by decision-makers.

Finally, various works also show how expert discourse, while having significant influence, is only one among several factors, which ultimately comes to weigh more or less heavily in the decision-making balance (Haas, 1992; Spector and Kitsuse, 1977; Fairclough and Fairclough, 2012). The fact remains that very great attention is generally given to experts as "discoverers" of reality (Farr, 1993; Blumer, 1971). Fewer works have looked at the process through which expert discourse participates in the construction of the social reality of the problem, and especially at the contradictions, tensions and paradoxes that go through this very process—and which then come to determine the aspects that will or will not be retained as part of the official definition of the problem and the action plans targeting it.

It is clear, however, that experts occupy a special place when it comes to producing knowledge that is shared in society (Hass, 1992). The expert, in this respect, therefore actively participates in the production of social representations and of objects of common sense. Through their discourse and its retransmission through the media, they participate in the transformation of an abstract, distant and scientific notion into a common, collective, concrete and everyday object of knowledge. This transformation of an abstract notion into

a concrete image defines what Moscovici (2004) called the objectification of social representations. This process, together with the representational anchoring, makes it possible to respond to the unknown and to face the uncertainty. A particular aspect of the process of the objectification of social representations allows us to study even more precisely the role of expert discourse in the construction of social reality, namely the naturalization of social representations (Negura and Plante, 2021). By definition, this stage follows the selective construction and structuring schematization of social representations (Moscovici, 2004).

Once naturalized, "ideas are no longer perceived as the products of the intellectual activity of certain minds, but as the reflection of something existing outside. There is a substitution of the perceived for the known" (Moscovici, 2004, p. 109). Ideas, notions and concepts, once naturalized, lose their falsifiable, theoretical or imaginary character; they simply "exist:" "At this point of concretization people can talk about the object, and through communication the object acquires the density of meaning that makes it a "natural" fixture in people's minds."(Philogène and Deaux, 2001, p.6). This last element refers more specifically to the reification of social representations, a process that gives a permanent, real, immutable character to entities that were once questionable, debatable and refutable (Mahendran, Maguson, Howarth and Scuzarello, 2019). Finally, representational naturalization is itself a dynamic phenomenon that can be studied in four phases: 1) recognition of specific traits by association following significant social change 2) elimination of contradictions through decoupling 3) instrumental use in communication and 4) validation through experience. (Negura and Plante, 2021) In the first two phases, the naturalization process is under development. It is a dynamic which involves the

constitution of the naturalized object, which is then reproduced in the following phases. The last two phases, on the other hand, have as their role the reproduction of the constructed social object and are observable when naturalization is already stabilized (fig. 2).

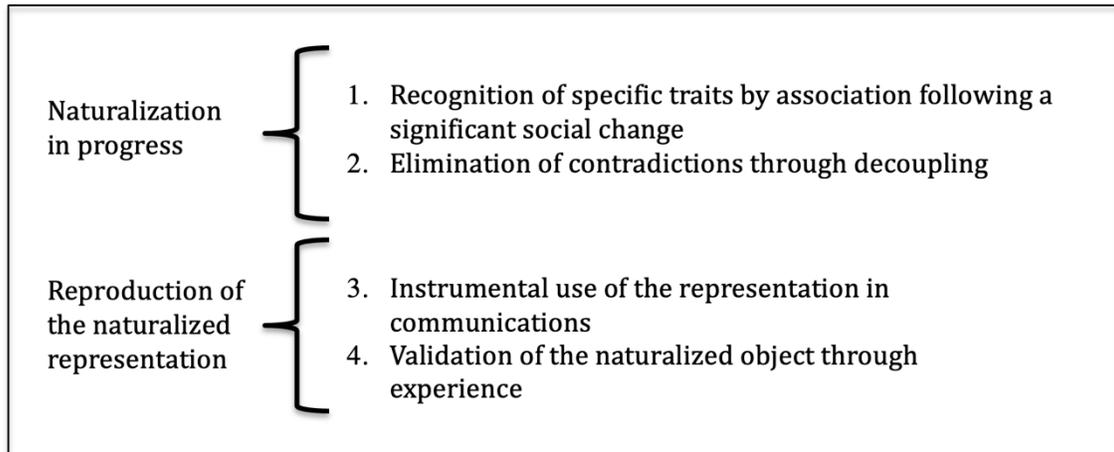


Fig.2 The four phases of the process of naturalization

There are only a few opportunities to study social representations when they are in the process of naturalization. The Covid-19 pandemic offers one such opportunity.

Methodology

To meet our research objective, we used the *eureka.cc* database to collect all media articles from Radio-Canada and CBC News³ on the subject of the Covid-19 pandemic that were published between January 1 and August 31, 2020. We have limited our corpus to a selection of articles on two themes. The first included all articles in which experts on

³ CBC/Radio Canada is Canada's public television and radio broadcaster. CBC/Radio-Canada's news site hosts 10,000 pages of information and 4,000 hours of audio and video segments that are viewed each month. 18.2 million unique visitors per month visit the CBC.ca news channel and 5.2 million visit Radio-Canada.ca, its French-language version. It was these sites that were consulted for our analysis. According to the CBC Annual Report, 83% of Canadians use at least one CBC/Radio-Canada service each month, and the same proportion of Canadians consider CBC/Radio-Canada to be a trusted source of information.

viruses, associated care or research surrounding Covid-19, including the Chief Medical Officers of Health, spoke in the media. The second included articles in which First Ministers and Ministers of Health were cited in addition to various agencies, ministries and health authorities. With this preliminary corpus, we proceeded with a reasoned sampling consistent with our research objective. Articles referring exclusively to specific geographic locations or to very singular or local cases related to the SARS-CoV2 virus or Covid-19 disease were removed. However, we retained articles that discussed key events, even if they were specific cases (e.g. outbreak on the Diamond Princess cruise ship). We set aside articles that addressed only international events without discussing the Canadian context (e.g. reflections about the decisions of other countries and their impact in Canada, WHO decisions, etc.). Finally, we kept articles written by news agencies and published on Radio-Canada and CBC if they met the previous criteria. 430 media articles were therefore retained by our sampling.

We then carried out an analysis of the collected materials using analytical questioning method (Paillé and Muchielli, 2012). The corpus thus constituted was questioned according to an analytical grid developed beforehand while formulating new questions in order to bring out themes and in-depth reflections on our initial research question.

Through our analytical questions, we have come to establish a typology of experts based on three criteria. First, experts were classified according to their epistemic perspective. We established two distinct groups: experts who work "closely" with the virus and the pandemic (public health experts, epidemiologist, physician, infectious disease specialist, etc.), and experts who consider the social, economic, cultural, psychological

aspects of the pandemic (psychologists, sociologists, economists, etc.). Second, we have distinguished experts according to their place in public debates. On the one hand, experts agree on risk management by recommending measures of social distancing, limiting visits, cancelling events, closing certain businesses and more. On the other hand, experts tend toward a less restrictive approach, criticizing containment measures and rallying around the principle of collective immunity (Lavazza and Farina, 2020). Third, we distinguish experts according to their proximity to international or Canadian political power. Experts from international organizations such as the WHO, expert officials working for Canadian federal or provincial governments, and independent experts often affiliated with universities make up the three categories of this last criterion. Using this typology, we will be able, in the analysis, to better explain the discourse of experts in the media around the different events of the Covid-19 pandemic in Canada.

Table 1: Typology of experts intervening in the media on the case of the Covid-19 pandemic in Canada

CLASSIFICATION CRITERIA	CHARACTERISTICS OF THE EXPERTS		
1) Epistemic Perspective	Bio-medical and public health field	Broader domain: social, economic, psychological, cultural	
2) Solutions provided by the experts	Social distancing, general or partial lockdown and cancellation of public events	Targeted measures, critical containment measures, herd immunity	
3) Proximity to power	Experts from international organizations	Experts civil servants	Independent experts

Results

Through various key events, we will show how experts discussed the Covid-19 pandemic in the CBC and Radio-Canada media. We will treat these events in chronological order and mention the contradictions, the concepts mobilized and the positions of the experts that emerge from our corpus of data.

In January 2020, the media we studied discussed the new virus in China, which was believed to be similar to SARS [Severe Acute Respiratory Syndrome]. This new

coronavirus was associated by the Chinese authorities with an outbreak in a seafood and fish market in Wuhan (Radio-Canada, January 18)⁴. The first interventions of the experts in the media show some optimism that the virus was discovered and reported quickly by China. Sometimes referred to as "Chinese virus" or "Chinese coronavirus" by experts (CBC, January 27; January 18; January 26), preliminary data on the virus showed that there was no human-to-human transmission of the virus and that the infection may have come from an animal source (CBC, January 9). The possibility of "low-level" human-to-human transmission was quickly confirmed (CBC, January 18), and fears about possible cases in Canada were expressed by experts (Miller, January 11). The entry of travelers from China was of concern to Canadian public health, which recommends that measures be implemented in place at airports, even though it stated that "the risk of citizens becoming contaminated is low" due to the small proportion of travelers from Wuhan (Radio-Canada, January 18). The risk of pneumonia and the infection of several people outside Wuhan were, however, of concern to health authorities (Radio-Canada, January 20).

The Canadian experts' gaze turned shortly thereafter to the situation in the country with the first confirmed case around January 28, 2020 due to a traveler returning from Wuhan. Despite the sharing of misinformation on the transmission of the virus that worried authorities and the risk of finding several other cases in the country (Harris, January 26), several independent experts stated that Canada was well prepared to contain this type of virus, in contrast to the SARS crisis in Toronto in 2003 that killed 44 people (Miller,

⁴ All article dates are from 2020. All references with the date without the year are journalistic references from our corpus. Some have no specific authors, and others are written by news agencies (e.g. Reuters). However, all the articles cited have been published on the news websites of Radio-Canada or CBC. We have cited the most representative examples. Other articles in the corpus analyzed may also have similar content.

January 26). New information on the virus confirmed that it could be airborne as a result of prolonged contact with other people (Miller, January 26). Experts therefore recommended that people wash hands regularly and cough into their elbow. The possibility of the virus spreading via surfaces in public places led to a systematic washing of subway and bus stations in Toronto (CBC, January 27).

The effectiveness of the surgical mask, worn by some citizens in Toronto, came under question. However, the essence of the debate on the mask would come later. New data on infected but asymptomatic people led Canadian public health to recommend in April that the mask be worn (Bureau, April 29; Tasker, April 7).

The question of the wearing of masks among young children was also a subject of debate. In fact, the wearing of masks to be mandatory for everyone, was the subject of a petition signed by about a hundred people, including doctors and pediatricians, as well as teachers (Radio-Canada, August 25). However, another petition collected more than 1000 signatures from doctors who demanded that the wearing of masks for children under 12 years of age be abandoned in Quebec schools because of the learning problems that could result from the mandatory wearing of masks (Boisclair, June 8). The pediatric gastroenterologist and co-author of the letter, Véronique Groleau, justified their position by invoking "the anxiety that this type of environment can generate in young children" (Boisclair, June 8). Some experts from other provinces were also debating that issue, with opinions differing. Some believed that among younger children, "wearing a mask is probably not a solution " because of the tendency of children to touch their face, which could increase the risk of infection (Bolduc, July 8). In short, the wearing of masks has

sparked a lot of debate and brought out contradictions in the points of view of several experts, even within the same field of study, such as pediatrics.

The first confirmed cases in Canada were from travelers or their immediate families, raising questions about the effectiveness of prevention and screening measures at airports. At the same time, a possible closure of Canada's borders was being discussed in the media. However, Canadian public health was very reluctant to recommend this action (Thomson Reuters, March 4). Experts said that the border closure would only slow the spread of the virus by a few weeks, but would do nothing to stop outbreaks in Canada (Gollom, March 2). Canadian experts were basing their recommendations on WHO recommendations (Zafar, March 13). Nevertheless, in the days following the WHO's declaration that the global health situation was akin to a pandemic, several countries had decided to limit travel and partially close their borders, and public opinion seemed to be pushing the Canadian government to do the same (Patel, March 16). Canada would follow suit by closing its air borders to visitors and foreigners on March 18 in the face of rising numbers of cases from travelers from Iran in particular (Radio-Canada, March 17), and by closing its land border with the United States on March 25.

The border closures came at the same time as the provinces of Quebec and Ontario announced measures to lock down and close businesses. However, many experts were concerned about the effectiveness of lockdowns before they were put in place (Crowe, March 19). Mental health specialists also spoke out to explain the harmful effects on mental health of prolonged lockdown (Lecomte, March 26). However, many experts believed that those measures were necessary to curb the spread and avoid congestion in hospitals

(Zimonjuc, Barton et Ling, April 28). "Flattening the curve" was a phrase often used to represent the evolution of infection cases over a long period of time (Osman, 19 March).

Also, it was the outbreak of a crisis situation in seniors' residences and long-term care centers, particularly in Quebec and Ontario, that alarmed the experts. In light of data showing that elderly people with Covid-19 are particularly at risk of complications, health authorities became concerned about outbreaks in nursing homes (Radio-Canada, March 13). Measures therefore became needed to avoid "families being devastated" due to the high mortality rate in those residences (The Canadian Press, April 11).

While the situation in retirement homes was feared by experts, the difficulty in recognizing the virus led to an increase in cases and deaths associated with Covid-19. Community transmission and asymptomatic carriers of the virus made it difficult to trace cases across the country. Moreover, although some experts believed that a herd immunity to the virus could be achieved through deconfinement (Radio Canada, April 23; Bolduc, May 14), several experts feared the risks of such a strategy, particularly among young people who might believe they are invincible (CBC Radio, March 31). Many citizens attending rallies, particularly youth, were portrayed as responsible for the increase in cases and emergencies during the deconfinement period (Jones, July 24).

While the schools were closed without much debate, the discussions on their reopening brought up several divergent points among the experts. Still, the fact that children with Covid-19 generally developed few or no symptoms was of concern to the experts. However, the closure of the schools was not questioned in the first weeks of the lockdown.

It was toward the end of the period of lockdown and business closures that some experts were discussing the possibility of reopening the schools, which had at that point been closed for a month. Notably, in Quebec, the National Director of Public Health wanted to reopen the schools in May, a few weeks before the end of the school year, to allow young people to develop immunity to the virus (Agence France-Presse, June 29). Several experts believed that the danger of reopening schools would be very low (Maltais, April 12). However, the possibility of an increase in transmission if schools reopened was discussed (Sampson, April 24).

On the other hand, experts, especially in the rest of Canada, were opposed to this measure (Bolduc, May 14). Beyond the issue of herd immunity and risk in children, the debate on transmission also highlighted certain contradictions. Media experts cited an Australian study that reportedly showed, using preliminary data, that there was "virtually no transmission of Covid-19 between children" (CBC, May 4). On the other hand, another article stated that "new data from Germany suggest that children are as likely as adults to transmit the coronavirus" (Bolduc, May 10). In short, many researchers proposed strategies for deconfinement around mask use and ventilation (CBC Radio, August 10; Radio-Canada, August 25), around the types of classrooms that should be built/designed to avoid contact and regarding the risks to children's learning that would result from shortening the school calendar even further (Weikle, July 28).

The beginning of the debate on the reopening of schools also coincided with the experts' discussions in the media about deconfinement. As with other topics, there was a divergence in the experts' discourse on this topic. On the one hand, some experts believed that ending the lockdown was possible as early as April, about a month after the beginning

of the lockdown, provided that the relaxations were gradual (Maltais, April 12). Deconfinement measures had to be carried out by providing for increases in cases and the possibility of closing down certain sectors if necessary (Zafar, May 9). On the other hand, experts believed that it was still too early to take such measures, even in May (Bolduc, 10 May; Maltais, 12 April). Avoiding large gatherings remained, however, a measure recommended by all the experts in the media analyzed.

Between June and August, Canadian provinces quietly eased several measures while keeping physical distancing in public spaces in place (CBC News, June 29). Many researchers believed that the virus could not be eradicated and that before widespread vaccination, it was important that Canadians learned to live with the virus by taking the necessary precautions (Zafar, July 9). Finally, the last few weeks of August show that a slight increase in cases was underway in Canada. Most experts were concerned that the abandonment of many measures and non-compliance by some citizens could lead to a potentially alarming spread of the virus (Girard and Maltais, July 17; Radio-Canada, July 26).

Analysis of the results

The analysis of the data shows that expert discourses on the Covid-19 pandemic have been transformed and modulated over time and with regard to the stakes prioritized in public debates. These numerous tensions are in apparent contradiction with the narrative that is part of the paradigm of "authoritative instrumentalism" (Colebatch et al., 2010) mentioned above and which states that science is the bearer of truths upon which political decisions should be based. From the point of view of representational dynamics, however, the presence of tensions and even contradictions is not necessarily a reflection of unscientific

debates or erroneous knowledge but is rather indicative of the process of a representational naturalization of the Covid-19 pandemic taking place. Let us recall that the process of the naturalization of social representations, once completed, allows ideas to exist in the same way as physical objects and that, in this way, the objects lose their debatable character.

Moreover, a more in-depth study of the naturalization process can rarely take place at the time of its occurrence, which limits our ability to adequately understand the potential effect of these contingencies on the construction of social reality. Indeed, the tensions and contradictions that may have emerged during this process are obliterated from the naturalized representation. The Covid-19 pandemic thus affords a rare opportunity to observe the naturalization process as it unfolds. In particular, we were able to observe the naturalization process of the Covid-19 pandemic with regard to the first two phases, namely: 1) the recognition of specific traits by association, following a significant social change and 2) the elimination of contradictions through decoupling⁵ (Negura and Plante, 2021).

Recognition of specific traits by association, following a significant social change

The notion of significant social change is in many ways similar to the concept proposed by Wagner (1998) of the *constructive event*, i.e. an event during which an entity is named, associated with attributes and values, and becomes integrated into a significant universe. The declaration of the pandemic by the WHO in March 2020 constitutes the significant

⁵ As the process of representational naturalization is ongoing, the analysis revealed the first two stages rather than the last two where naturalization is confirmed: instrumental use in communications and validation through experience (Negura and Plante, 2021).

social event that triggered the transformation of the entity of a new coronavirus into a social object.

As we have seen from the results, this major change can be subdivided into several other events that have also led to significant social changes in Canada. At each of these events, from the appearance of the first case in China, to the first case in Canada and the various measures put in place, expert discourse has contributed to the recognition of specific traits through the association of the virus with certain groups.

As in other studies of social representations of Covid-19 and other infectious diseases, we find that these groups have evolved and are typically divided into heroes (such as health-care workers), villains (such as travelers and young partygoers) and victims (such as elderly people) (Wagner-Egger et al., 2011). With regard to the victims, one of the specific traits of the pandemic is thus recognizable in the association of the virus with the increased risk of physical health problems and death for the elderly (or chronically ill). The victims of the virus are then clearly identified: the elderly and those with underlying conditions. However, the various expert discourses show that the risks to the physical health of the elderly are not the only consequences of the Covid-19 pandemic (Bavli, Sutton et Galea, 2020). Other traits are associated with the pandemic, such as mental health problems, economic hardship, learning and developmental difficulties in children, etc. These traits target specific groups such as youth, the unemployed, and children who are also affected, albeit in different ways, by the pandemic.

In another vein, the association of the Covid-19 pandemic with specific groups, whether those groups are viewed positively by the population (such as medical personnel) or negatively (such as young partygoers), is implicit in expert discourse and draws on a

baggage of shared representations (e.g. the social representation of young people as reckless, see Masse, 2020). This tendency to stereotype is in line with the comments of several authors who emphasize the mainly symbolic aspect of this type of association, particularly with regard to the othering and association of problems with groups that are already marginalized or stigmatized (Mayor et al., 2012). This process allows the group that benefits from it to redirect the perception of threat and reduce the discomfort generated by the state of anxiety (Páez et Pérez, 2020).

For Farr (1993) this social phenomenon underlines the responsibility of scientists to take into account common sense:

The mere publication of medical statistics generates new social representations and reinforces or alters old ones. If scientists ignore social representations they may find that the consequences of the advice they offer governments is not what they intended. They will then be heavily into the business of altering social representations that arose from their previous advice. (p. 202)

In many ways, the Covid-19-pandemic highlights instances where the needs of some have clashed with those of others. Health, mental health, the economy, social issues, education and the quality of learning are, to some degree, in competition. Indeed, in the media, experts, by discussing the different aspects of the pandemic according to their fields of expertise, inevitably put those aspects in tension with each other. In this way, physical health finds itself in “competition” with mental health, economic wellbeing, education and quality of learning, as well as social problems (poverty, homelessness, domestic violence and child abuse).

Elimination of contradictions through decoupling

In the second phase of the representational naturalization, a process of decoupling is under way with regard to the risks associated with the Covid-19 pandemic. The risks of this

pandemic are perceived mainly with regards to physical health, especially that of the elderly, but those risks have been decoupled from the other elements mentioned above. This focus on physical health is reflected in the centrality of the debates on the transmission of the virus, regardless of the issue at stake (mental health, education, violence, poverty, economy, etc.). This observation is in line with Jodelet (2020) when she explains that biological life has supplanted other forms of life in recent years. Health is often associated with the physical health of the body and the absence of disease, leaving mental or psychological health, which is still highly stigmatized in Canada (Findlay et al., 2021, Lévesque, Negura et al., 2018; Sareen et al., 2005) and elsewhere in the West (Roelandt et al., 2017), in the margins. Health risks for the present and the future are, moreover, fraught with uncertainty. For Jodelet (2020), these fears about the present and the future are what distinguishes the Covid-19 pandemic from other pandemics that preceded it, where the focus was more on helping victims and on mortality. In the case of Covid-19, although mortality was emphasized, attention quickly shifted to uncertainty and widespread risk due to possible transmission by asymptomatic individuals. The decoupling carried out in the process of the naturalization of the Covid-19 pandemic between the different risks that this problem presents to society also lends support, although on another register, to the comments of Bavli et al. (2020). For these authors, collateral damage has not been sufficiently taken into account in governmental decisions and measures. For us, not only have these elements not been taken into consideration, but they have in fact been decoupled from the pandemic problem, whose naturalization process has contributed to making it a problem centered first and foremost on physical health risks.

Also, expert discourse participates in the debates but does not allow for decoupling or responding to contradictions. It is the political decisions that have been made that allow decoupling to be done. The function of the expert discourses of legitimization regarding political decisions underlines the distinctive role of experts in the process of the representational naturalization of the Covid-19 pandemic. This is all the more important as the amount of information (and disinformation) concerning Covid-19 and the speed of their propagation is unprecedented (Jodelet, 2020). The experts then symbolically come to play the role of gatekeepers of information and bearers of truths; the journalists who interview experts, and who represent the public, expect experts to be clear, precise, consensual and unequivocal. For Moscovici (1993), these social expectations of science are both a reflection and an effect of the social representation of science. He adds that this representation of science as a uniform and consensual entity actually brings it closer to belief:

[P]aradoxically the quest for consensus in a science as a sign for its exceptional character can have the consequence of setting one theory apart and above discussion, hence changing it into a belief made immune against falsifications and contradictions as religious or political beliefs can be. (Moscovici, 1993, p. 366)

Thus, beyond competence, the credibility and legitimacy of experts rest on a remarkably symbolic foundation. In the face of threat and chaos, experts symbolically hold the tools to restore order (Éliade, 1965). This can be explained, among other factors, by the anchoring of expert or scholarly knowledge in the thema opposing the initiated (or the sacred) to the profane (Negura, Plante and Lévesque, 2019). The notion of thema, or themata in the plural, refers to dyadic oppositions that are at the source of the human capacity to create new knowledge, to imagine concepts and at the same time to organize them (Markova, 2017; Moscovici and Vignaux, 1994). In the case at hand:

The adjective "profane" [...] ends up designating [...] the ignorant in relation to the expert, the uninitiated in relation to the insider [...]. The profane [has] become the one outside the laboratory, a laboratory which, in this context, occupies the place formerly reserved for the temple, or the room of mysteries. (Borgeaud, 1994, p. 391)

The thema that opposes the initiated and the profane contributes to anchor scientific knowledge in a distinct representational sphere. It also confers an exceptional status upon experts, scholars and others initiated into "sacred things" (Durkheim, 1925, p.25). This sacralized aspect of science is not due to its complexity or its methods, but rather due to its image, which is placed at a distance and reserved for a very limited group, and thus prohibited to other non-knowers, non-initiated lay people.

Another important element that the debates and contradictions in the expert discourses demonstrate concerns, if not the absence, at least the scarcity of consensus among experts⁶. This can be seen, for example, in the question of the wearing of masks, debated within the same field of medical specialization, or the question of the closing of borders or the transmission of the virus by children (to name but a few examples). These debates contribute to reaffirming our position that the decoupling necessary for the process of representational naturalization is the result of political decisions that have been taken, and not of expert discourse. Indeed, these decisions cannot be based entirely on expert discourse (which is contradictory and limited) and necessarily draw on the values, norms and interests of political actors, their ideologies, and even the imitations of government measures taken elsewhere, which are all within the realm of the common sense. According

⁶ An interesting point is that in research using the symbolic coping model (Wagner, 1998), the emergence stage is consistent with the diffusion of Covid-19's hegemonic social representation and is largely based on the idea of consensus (see Páez et Pérez, p. 2). However, when we look specifically at the discourses of the experts, we see that they are far from being so consensual. The pressure for compliance came after decisions were made by the various levels of government.

to the *deficit model* (see Wagner, Kronberger and Seifert, 2002), a dominant model that is epistemologically close to the paradigm of "authoritative instrumentalism," basing political decisions of the utmost importance on common sense would probably be the worst-case scenario.

However, as we can see from the inability of expert discourse to eliminate contradictions:

No science will relieve common sense, even if scientifically informed, of the task of forming judgement. (Habermas, 2003, p. 108)

Conclusion

Our results thus allowed us to observe the first two stages of the process of the representational naturalization (Negura and Plante, 2021) of the Covid-19 pandemic. Following the significant social change created by the pandemic, the experts, in accordance with their specific expertise, the solutions they proposed and their proximity to power, contributed during the first wave of the pandemic to the process of understanding Covid-19 by explaining in the media the virus's nature and its threats. This process has implicitly facilitated the association of the different risks of Covid-19 with certain groups (for example, the physical vulnerability of the elderly to the virus, the psychological suffering of young, the learning difficulties of children and the precariousness of the unemployed). The tensions between these aspects of the pandemic in relation to the specific needs of different groups (the physical health of some in comparison to the mental health of others, for instance) create contradictions and conflicts that are resolved by decoupling physical health from other traits in the second stage of the representational naturalization process. This phase of the elimination of contradictions, dominated as we have seen elsewhere by

polemical representations (Páez et Pérez, 2020), is ongoing during the first wave of the pandemic. This explains why we have not found, in our results, elements of the third and fourth phases of representational naturalization, by which the new social reality is reproduced.

However, the reality of the Covid-19 pandemic, according to our data, is already being identified as a major risk to the physical health of the population. More precisely, it is a pandemic with two faces: very serious for a certain part of the population, quite benign for the rest (which explains the constant and necessary efforts to convince the population to respect the restrictions). It is also a virus with invisible transmission (by asymptomatic people), which explains the use of masks, whose physical reality also helps to keep the virus visible. Finally, the risks are also associated with the overcrowding of intensive-care units, which must be avoided, and with the importance of flattening the curve. These three elements constitute, in light of our results, the object of the Covid-19 pandemic. Recalling the concepts used by Wagner (1998), objects are entities that have been domesticated. As a result, objects are *specific to* the group that participated in their creation. Conversely, it is also the objects that give the group its specificity.

Thus, what other authors such as Bavli et al. (2020) have presented as the collateral effects of government measures are, from this perspective, just as much the direct consequences of the Covid-19 pandemic as the number of hospitalizations, but they are being decoupled during the process of representational naturalization. In other words, another society, at another time, could have identified mental-health issues as a central element in the fight against the Covid-19 pandemic, which would certainly have given rise to a completely different set of practices and social realities. As Apostolidis et al. (2020) have also pointed

out: "[...] the Covid-19 pandemic is not only a medical object, but also and eminently a social one. A polemical, polymorphic and conflictual object generating tension at several levels" (p. 2).

We can thus see that experts have presented a varied discursive dynamic in the media. On the one hand, the experts' discourse varies in terms of their proximity to the object of study, as well as their proximity to the decision-making power. On the other hand, the discourse also varies with regards to contradictory study results and, as a corollary, to varying positions on the measures to be adopted. There is therefore no a uniform expert discourse on the truth of the virus, contrary to what seems to be suggested by policy makers when they claim in the media, for instance, to base their decisions on the best scientific advice. Moreover, policy makers influence the direction of expert discourse through their decisions. The expert discourse then serves to either justify these decisions or criticize them without contributing in a decisive way to the construction of the reality of the Covid-19 pandemic. The expert discourse and the political discourse thus participate in a dynamic way in the representational naturalization of the Covid-19 pandemic.

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