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COVID-19 conspiracy theories in Canada: Evidence, verification, and implications for decision making

Abstract

Aim/purpose – The COVID-19 pandemic generated a new communication universe with numerous actors, including conspiracy theory (CT) promoters who spread skepticism about the authenticity of the pandemic and the necessity of health emergency regulations. This study explores the dissemination of COVID-19 conspiracy theories in Canada to create a model for verifying conspiracy theories, especially in the context of decision making.

Design/methodology/approach – The study was transdisciplinary and it was composed of an empirical and a conceptual part. The first part used analysis of websites and social media, observation with participation for data collection, and standard content analysis for data analysis. The conceptual part used a philosophical inquiry and a framework on heuristics in decision making.

Findings – The empirical part of the study established three types of conspiracy theory promoters and labeled these as Conspiracy Theory Mill, Busy Gunman, and Hyper Relay. The conceptual part of the study created a model for CT verification. The study extends conceptualizing of conspiracy theories by characterizing them as narratives based on arbitrary ontological assumptions, epistemic *naïveté* and flaws, and contorted and biased logic. These narratives represent a form of folkish storytelling and entertainment, which become dangerous in the state of a public health emergency.

Research implications/limitations – The study has implications for research on conspiracy theories and for the theory of decision making. The study's insight into the Canadian conspiracy theory landscape is limited by the types of social contexts studied.

The model for verifying a conspiracy theory, which the study developed, is still incipient in character and needs further validation. The model can be used in decision-making theory.

Originality/value/contribution – The study confirms the literature on conspiracy theories originating in the areas of psychology and cultural studies. Beyond just exhibiting characteristics reported in the literature, the discovered three types of conspiracy theory promoters may advance the corresponding typology research. The model for verifying a conspiracy theory may contribute to research on the nature of conspiratorial content as well as to decision-making theory. Practically, the three promoter types and the verification model can be used as part of a blueprint for identifying and controlling conspiracy theories. Decision-makers at large may benefit, including those in health institutions, government, business as well as lay people.

1. Introduction

The COVID-19 pandemic generated a new communication universe. Numerous actors have targeted masses of informing clients; many of these actors act as relay informers. Conspiracy theory promoters (CT "theorists") are one of these visible informing actors. They spread skepticism about the authenticity of the pandemic and the necessity of health emergency regulations introduced across the world (Douglas, 2021; Rutjens et al., 2021). The virus origin, disease nature, protective regulations (masking, social distancing), inoculation against COVID-19 – all these aspects of the pandemic are subject to conspiratorial thinking (Cassata, 2021; Mannan & Farhana, 2021).

Old mass media, new social media, and internet-based publishers have been involved in the current CT pandemonium. High-profile politicians in some countries have been engaged as well (Germani & Biller-Andorno, 2021; Tollefson, 2021). Some CT sources are so active that they acquired the label "superspreaders" (Klepper et al., 2021). Medical and government authorities warn of an ongoing "infodemic" of vaccination hesitancy spreading online (Burki, 2020; Garneau & Zossou, 2021; Hotez, 2020). Some older, overarching CTs are refueled by a pandemic-instigated irritation, such as the CT on globalization as part of a global conspiratorial cabal (Harambam & Aupers, 2021). This whole COVID-19 CT blast has effects empirically verifiable in reported street protests of anti-maskers, anti-vaxxers, and other "freedom" movements targeting pandemic emergency policies internationally (*Al Jazeera*, 2022; *CBC News*, 2022; *CTV News*, 2022; Tasker, 2022; Wikipedia, 2022b).

This study explores the dissemination of COVID-19 CTs in Canada to create a model for CT detection. It is important to understand public informing aspects during the pandemic time, particularly against the backdrop of unsettling evidence. Canada has usually been viewed as a peaceful country capable of balancing its complex multicultural context (Schwartz, 2015). However, it surprised the world in early 2022 when protests over mandatory COVID-19 vaccination of truckers, who were involved in the commercial transport between Canada and the US border, erupted suddenly and were covered by the global media. Although it echoed the pandemic skepticism in other countries, this was Canada's genuine "freedom movement" that brought up blockades with heavy vehicles as a new protest method. In fact, it was carried by a tiny minority of anti-vaxxer truckers collaborating with some farmers and right-wing political groups at the core (Roach, 2022).

Early evidence also indicated echoing a social media-channeled "infodemic" in association with the "freedom convoy" (Scott, 2022). A survey found that 96% of Canadians were exposed to online COVID-19-related content they suspected as being incorrect. However, only 20% of the respondents always checked the accuracy of such content, while 50% shared it without checking its accuracy (Garneau & Zossou, 2021). These facts and the involvement of the author in the domestic context qualify Canada as an appropriate location for research.

Understanding what a CT is can have implications not only for citizens' sense making but also for decision making in organizations of various types (health, governmental, business). In general, a global pandemic creates a situation of high uncertainty, which is an area of research within decision sciences (e.g., Kahneman & Tversky, 1972, 1979).

2. Research problem

CTs have long attracted the masses and resided in public discourse everywhere (Uscinski, 2018). CTs cover an astonishing topical scope, including health, everyday life, politics, science, public personas, groups, organizations, and science fiction subjects (Wikipedia, 2022a). They usually thrive over again in the time of uncertainty (Romano, 2020).

Popper (1945) discussed the "conspiracy theory of society" in a manner that has some similarities with today's concept. Today, CT refers to a belief that some covert but influential organizations or groups with malevolent intentions are responsible for a circumstance or event (Douglas et al., 2017; Oxford Learn-

er's Advanced Dictionary, n.d.). A CT asserts that nothing is what it seems, and there is a master plan behind all major events in world history (Barkun, 2013; Hübl, 2020). In addition, a CT draws on "the unnecessary assumption of conspiracy when other explanations are more probable" (Brotherton et al., 2013). Consequently, the truthfulness of CT is dubious and subject to verification (except for apparently nebulous CTs) (cf. Harambam & Aupers, 2021). These definitions delineate CT from conspiracy as a method of political organizing and struggle, which is a legitimate concept in political science.

The COVID-19 pandemic generated a whole new communication universe. Government and medical authorities have been quite visible and taken a significant portion of mass media time. The World Health Organization (WHO) was also a visible informer. As everybody was taken by surprise and the situation around the world was chaotic, gaffes crept into public health communication. Notably, WHO obscured communication by taking out the word "SARS" from the name of the new virus "SARS-CoV-2" in order to prevent a mass panic (WHO, 2020). This misnomer could have misled policymakers and their constituencies to mistake COVID-19 for a form of the common flu. Interestingly, one of the first COVID-19 CTs evolved around the belief that the disease is not more dangerous than the flu. This CT persisted at the time of this paper.

COVID-19 conspiracies emerged immediately after early news about the new disease (van Bavel et al., 2020). These cover the entire pandemic subject from the new virus origin, through the nature of the disease, to the pandemic containment interventions by medical and government authorities, and vaccines (Douglas, 2021). The authenticity of the pandemic is rejected and government--issued statistics are doubted (e.g., Chossudovsky, 2022). CTs about visible personas in the context of the pandemic are in circulation as well, such as lead epidemiologists and philanthropic investors in vaccine research. Within each of these segments, there are even more specific CTs. For instance, COVID-19 vaccines have triggered CTs claiming that vaccines do not work, do harm health ("make people magnetic," "kill fertility," "terminate life"), produce variants of the original virus, infuse chips to control people, use fetal tissues, modify DNA, and cause COVID-19 rather than heal it (Cassata, 2021; Hamel et al., 2021).

COVID-19 CTs have been studied with regard to antecedents, adoption propensity, and effects (Brotherton et al., 2013; Butter & Knight, 2020; Robertson, 2016; Rutjens et al., 2021). This is the domain of psychology, cultural studies, and health communication. Insights into conspiratorial cognition and its behavioral consequences are relevant for decision-making theory as well. As the

COVID-19 pandemic has disturbed domains of public health, business, and civic liberties, humanity has faced significant uncertainty. Answers are urgently sought regarding the seriousness of the disease, its origin, the need for protection, the trust-worthiness of authorities imposing health emergencies, and behavioral choices (Oleksy et al., 2020; van Prooijen, 2019; Prooijen & Douglas, 2017). In this chaotic situation, CTs may offer a path to quick but misleading answers in the individual and organizational contexts. In decision sciences, this research problem belongs to the rubric of judgement under bounded rationality and uncertainty (Edwards, 1954; Kahneman & Tversky, 1972, 1979; Simon, 1956).

CTs have evidently influenced decision making of some high-profile political personas, such as presidents of the U.S. and Brazil. Both of them publicly mini-mized the seriousness of COVID-19, rejected defensive measures, promoted un-proven medications over the need for vaccination, denied medical science, and urged prioritizing of business over the public health protection (Canineu & Muñoz, 2021; Germani & Biller-Andorno, 2021; Romano, 2020; Tollefson, 2021). Private citizens have not been spared from CT influences on their decision making. For example, believing in risk-rejection conspiracy theories (e.g., "COVID-19 is like influenza and was purposefully exaggerated") leads to applying fewer preventive measures and making lower risk assessments in the pandemic's severe stage (Chan et al., 2021). Similarly, people who have believed in government-related CTs less frequently tended to apply social distancing, handwashing, and other prevention methods (Oleksy et al., 2020). Moreover, believing in conspiracy theory undermines COVID-19 vaccine acceptance, while individual awareness (increased interest in the vaccination issue) influences vaccine acceptance (Akther & Nur, 2022).

This study focuses on the problem of detecting a CT. In contrast to psycho-logical and cultural approaches, the approach taken here is transdisciplinary. What makes a CT source and how it can be recognized? How can a CT be eval-uated? What are the focal aspects subject to the evaluation? What is the content and logic of a CT? What is at the core of a CT? What metric could be used to verify promptly a CT? These questions map the research problem of the study.

3. Methodology

The research problem of the study refers to creating a model for CT verifi-cation. To this end, the following questions are investigated:
1. What is the current evidence of COVID-19 conspiracy theories in Canada?
2. What is the design of a model for verifying a conspiracy theory?

The key concept studied is that of CT. The definitions discussed above point to key elements of a CT:

- nothing is as it seems and reality is hidden to perception,
- in reality, there is a powerful conspirator,
- the conspirator has malevolent motives,
- the conspirator's plot causes significant events and circumstances,
- claimed causality is less probable than optional explanations (Barkun, 2013; Brotherton et al., 2013; Douglas et al., 2017; Hübl, 2020; Oxford Learner's Advanced Dictionary, 2020).

These definitional aspects were used in investigating the first research question.

The study progressed in two parts – empirical and conceptual. The former study combined an evaluation of the content published on the website Global Research, tweets of Canadian pandemic denier Christopher Saccoccia (a.k.a. Chris Sky), and an investigation of a COVID-19 discussion group. The results of this study part are presented as mini-cases.

Data collection methods were content analysis of the Global Research website and of Chris Sky's tweets and website. For investigating the COVID-19 discussion group, the method was observation with participation. In all these, the unit of analysis was the topical content. The COVID-19 discussion group formed partly spontaneously and partly on the initiative of a person who was going to turn into a communication star within the group. The communication medium was email. The group had about a dozen participants, some engaged in a mutual relationship outside the group. All participants had a university education. Communication transpired every week from the start of the pandemic in March 2020 until the end of the year. The communication frequency was uneven across weeks because some topics/posts attracted more numerous replies than others. These empirical data were analyzed by the means of standard content analysis in search of indicative characterizing concepts and patterns. No quantification of the findings was made.

In decision sciences, this research problem belongs to the rubric of judgement and decision making under bounded rationality (Edwards, 1954; Simon, 1956) and uncertainty (Kahneman & Tversky, 1972, 1979). The Kahneman––Tversky framework provided the fundamental assumptions for the design of the model for verifying a conspiracy theory.

4. Findings: Conspiratorial minds in Canadian landscape

CT sources are numerous, ranging from occasional promoters to systematic ones and "superspreaders" (Klepper et al., 2021). Klepper et al. (2021) cited the following organizations and personas as superspreaders: GreatGameIndia, ZeroHedge, RedStateWatcher, Centre for Research on Globalization or Global Research, Igor Nikulin (Russia), Greg Rubini (favored by the QAnon community), Kevin Barett, Luc Montagnier (Nobel Prize winner for HIV research), and Iranian leaders. The former American President has been portrayed as a prominent CT promoter as well (Germani & Biller-Andorno, 2021; Romano, 2020; Tollefson, 2021). Since the Centre for Research on Globalization/Global Research is located in Canada, it is included in the empirical investigation part of the study.

4.1. Milling conspiracy theories: Global Research centre

Global Research is a Montreal-based portal founded and managed by a retired professor of economics, Michael Chossudovsky. It is an institutional proponent of pandemic skepticism (Daigle, 2021; Klepper et al., 2021). According to statistics by Alexa (2020), the Global Research site contains over 20,100 articles, is referenced by around 9,600 websites, and its traffic global rank is 55,161 (there are around 1.7 billion websites in the world).

The search performed on the keyword on "COVID-19" on the Global Research website returned 10 pages with links. Each link is an article title complemented with a snippet containing the tag "COVID-19" and publication date, and a content brief. Notably, the retrieved articles published before 2020 have no connection with the COVID-19 topic and even do not cite the term. They are about various geo-political topics and are often country-specific.

The Global Research COVID-19 topics surveyed fall into several rubrics: evaluation of vaccines, lockdown portrayal, pandemic characterization, pandemic data evaluation, media coverage, treatment of critics of the pandemic policies, and commentaries on the pharmaceutical industry. The first rubric is the largest; within it, the articles on alleged harmful effects of vaccines comprise the biggest set. Other evaluations assert that vaccines do not work, are unnecessary, and present a form of oppression. Further, the pandemic is characterized as being fabricated and used for control purposes. Pandemic casualty statistics, including test results, are assessed as incorrect and manipulative. The pharmaceutical in-

dustry engaged in research on vaccines is criticized for prioritizing commercial interests over public health protection. The media coverage has also attracted criticism from Global Research authors while whistleblowers are defended.

A sample of articles analyzed indicates a clear CT content, which is consistent with the tone of the titles and descriptions of the articles. The true reality of the pandemic is allegedly in the plotting of the Canadian (and other) government(s), pharmaceutical companies that produce vaccines, and mainstream media. These conspirators keep citizens hostage to false reporting, faulty testing for infections, and harmful vaccines. The conspirators add silencing of whistleblowers to their evil acts.

The cabal behind COVID-19 is decisively "revealed" in the writings of the founding father of Global Research. Chossudovsky (2022) argues that the declaration of the worldwide public health emergency by the WHO was groundless because the scope of infections was very low: "March 11, 2020: 44,279 cases outside China. There was absolutely no justification to launching the lockdown as a means to combating a non-existent "pandemic". The author also claims that the "flawed PCR-RT Test (which does not under any circumstances identify the SARS-CoV-2 virus) has been used worldwide to generate millions of erroneous Covid positive cases". Further, the author asserts that Bill and Melinda Gates Foundation, Big Pharma, and the World Economic Forum were behind the push for testing; WHO worked in concert.

Apparently, all the CT elements are in place: while on the surface it seems to be a pandemic, in fact, it is a fabrication plotted by hidden institutional conspirators who endeavor to control people in Canada and around the world. Chossudovsky's figure cited above, which is not referenced to any source, is incorrect by over 50% as the real number is around 68,000 (Johns Hopkins University, 2020; Worldometers, 2022). However, the reasons for declaring the pandemic emergency went far beyond the sheer number of cases, including the quick escalation of the contagion across countries, the community spread, and an uncertain infection rate while no vaccines and prophylactics were available (Travica, 2020a). Chossudovsky neglects these facts, thus building his argument on both inaccurate and incomplete evidence. His references are for the most part from his own e-book on the pandemic, which is offered as a free download.

Chossudovsky's (2020-2022) e-book maps the publishing orientation of Global Research. The book discusses "social engineering" and a "destabilization" of institutions of civil society, lockdown policies that "trigger unemployment and mass poverty" and make "devastating impacts" on mental health, Big Pharma that pushes "unapproved/experimental/dangerous" COVID-19 mRNA vaccines which "affect

the human genome," "derogation" of fundamental human rights, "censorship" of medical doctors and movement for "freedom of expression,", etc. The diabolic picture gets completed with consequences of the alleged pandemic plotting in a "global debt crisis," "destabilization" of national governments, and "threats to democracy by global governance" and "the World Economic Forum's 'great reset' proposal."

The articles published on the Global Research website use either a very small number of references or none. The references are typically electronic publications consistent with the publishing policy of Global Research or fringe medical sources (some Canadian and many international). A good portion of published articles include reprints from the conspiratorial domain, such as Planet Today, Off-Guardian, South Front, Don't Talk TV, and VaccinesNews. The first two were explored in this study and found to be complementary to Global Research regarding the conspiracy perspective.

Overall, Global Research appears as a mill of COVID-19 CTs and is tightly linked with like-minded publishers.

4.2 Shooting from the hip: Chris Sky

A prominent Canadian promoter of COVID-19 CT is Christopher Saccoccia, also known as Chris Sky. His LinkedIn profile entitles him as a Vice President of Skyhomes Corp. in Ontario, Canada, a civil construction company owned by his father. On his website, he introduces himself as a "motivational speaker and the world's most prolific human rights advocate" with "vast knowledge and articulate delivery" which are "second to none when it comes to examining and presenting the facts to find the truth" (Realchrissky, 2022). Sky's mission is stated as follows: "as our country and much of the world slides steadily towards tyranny […], his message of truth and advocating for basic human rights has made him a target of our government."

Coming from a far-right background, Sky has been engaged in lobbying against restrictions imposed during the pandemic health emergency to the extent that he attracted criticism from major political personas in Canada (DiMatteo, 2022). He has been consistently downplaying the pandemic, going against pandemic-related restrictions and vaccination, and organizing protests. Sky labels the pandemic situation with borrowed sarcastic terms, such as "plandemic"; the "plan" word points to a CT that the pandemic is fabricated. Sky was arrested several times across Canada in 2020-2021. Undeterred, he played an active role in the "freedom convoy" cited above.

Sky was active on Twitter until the company suspended his account in December 2021. His tweets were surveyed as part of this study. The tweets reference homemade videos of Sky and of his appearances in protests and before media. Sky speaks fluently and behaves naturally on the podium, but he may utter vulgarities and rebukes of politicians and even his followers who he deems insufficiently active. In a recent video, his obscene rhetoric targeted Canada's Prime Minister for hiding before Canadian truckers protesting the mandated vaccination (Sky, 2022).

In his tweeted videos, Sky consistently communicates an intention of undermining pandemic restrictions. During the earlier stages of the pandemic, he put much effort into organizing anti-masking rallies staged across Canada. In doing so, he violated the rules for size limits on outdoor groups, which in Canada have varied from single to double digits. His rallies gathered hundreds of anti--maskers and pandemic deniers. Sky was arrested multiple times and expelled from Canada's provinces where he rallied. He rejected social distancing policies by promoting "private on-demand schools" for maskless pupils. The financing came from fundraisers via the Facebook group Mothers against Distancing (MAD) and the crowdfunding business GoFundMe (DiMatteo, 2022). With the advent of vaccines, Sky changed the key target. For instance, he tweeted (incorrectly) that the province of Quebec had the highest vaccination rate and the highest number of deaths, while Alberta was the lowest on both counts (#justsayno, 2022).

In another video, Sky tweeted his interview that is supposed to explain the motives behind his fight. He alleged that the government artificially created the health emergency in order to destroy business and, consequently, people's livelihood, which would increase control over people. When businesses are destroyed, people become dependent solely on the government for the paycheck. Consequently, the society transforms into a "government class" and "slaves" that work for the government – Sky's narrative concluded (Andrew Says TV, 2020).

The number of views of Sky's videos varies from dozens to thousands. Interestingly, however, readers' comments are more often critical than supportive, as this example illustrates: "A reason conspiracy cult movements like Q, anti-vax, anti-mask, CRT alarmists, etc., continue to attract followers, is b/c it's a way for dumb grifters to gain influence. #MTG #LaurenBoebert #ChrisSky wouldn't be listened to otherwise. It's a pyramid scheme for influential idiocy." ($e\text{^-}1/x\text{^}2$ [HeatherMoAndCo], 2021).

Sky's posts have had a stronger endorsement in Twitter groups of pandemic deniers. Some of these continued posting Sky's videos after his Twitter account was suspended. Overall, Chris Sky appears a merciless, busy gunman that fires familiar COVID-19 conspiracies via Twitter and physical rallies.

4.3 Steady relaying: Conspiracy theory group Star

This section brings evidence from this author's observation with participation in a small, email-based discussion group that evolved around discussing the COVID-19 in 2020. Of all the participants, this analysis focuses on a particular person distinguished as a communication star and persistent promoter of the CT content, code-named "CT Star."

During the observation period, the group differentiated on the pandemic skeptics/deniers (a bigger part) and opponents of that stance. CT Star typically started discussion threads by emailing links to video clips or articles along with a lapidary comment. The range of topics was broad. The list included the lab origin of the COVID-19 virus alleging several countries, downgrading the seriousness of COVID-19, characterizing the virus as a bioweapon although not too dangerous, promoting unauthorized medications, criticizing the use of protective facial coverings, sheltering in place, American epidemiologist Dr. Fauci relaying opinions of medical doctors-pandemic deniers and recommending to land ears to personas from the intelligence and military community with alleged deep knowledge of the situation. CT Star's selection of informing sources included YouTube (most frequent), Fox News, Twitter, and various web publishers.

The favorite type of post for CT Star was a video clip or an article by a person from the intelligence or military community irrespective of their residence. CT Star would cite their past positions as firm proof of the credibility of their opinions. If some group participant questioned the epidemiological competence of these personas, CT Star would state his conviction that intelligence and military people had special, insider knowledge of the situation. Similarly, if someone cited rising numbers of infections and deaths as proof against pandemic skepticism, CT Star countered that the numbers were inflated because true causes of each death were not established via the autopsy. By contrast, CT Star rapidly endorsed emails that complied with the line of discussion CT Star maintained.

CT Star never came with a rounded CT but instead kept sowing doubt into the pandemic's authenticity and containment restrictions. Acting as if the pandemic hoax was common knowledge, CT Star made a provision of "proofs"

a standing task. An exception was the post of a video featuring a former, high-ranking military officer. In it, the ex-officer speculated about a geo-political war that allegedly caused the pandemic. CT Star commented that "a global alliance of Satanic/Cabalistic/Masonic deep state governed from London" had unleashed "a biological warfare against humanity and Christianity" with the goal of removing American, Russian and Chinese presidents as current power brokers. A rebuttal of this post labeled it as an "arbitrary speculation ignoring complexity of the world that can't be broken down just to two opposed forces." CT Star retorted by labeling this response as "a consistent leftist thinking." Later on, CT Star revisited this topic, and emphasized that the American and Russian presidents were on the same side fighting a "neo-liberal new world order."

Within the group observed, some participants criticized CT Star for spreading CT thinking when energy could be used better for supporting social efforts of containing the pandemic. In the beginning, CT Star accepted the discussion but just at the lexical level. Indeed, CT Star continued sharing more references to pandemic skeptics complemented with the ironic comment, "here is one more CT." Later on, CT Star rejected linking own posts to CT in any manner.

At some point in 2020, CT Star began supporting American President Trump for his stance on the pandemic. As the American presidential election race hastened, CT Star broadened his support. The discussion within the group drifted away from the pandemic. There was a pro/contra split within the group regarding Trump. When the election was over, CT Star denied that Trump lost it. Soon after, this discussion group disbanded. Overall, CT Star believed in a geo-political cabal allegedly responsible for the COVID-19 pandemic and acted within a small group discussing COVID-19 to spread pandemic-related CTs.

5. Toward a model for verifying and detecting conspiracy theories

The second research question concerns the design of a model for CT verification. Answering this question requires inquiring into the philosophical underpinnings of CT. Let us start from postulates implied in the findings so far:

1. Reality is not as it seems but it is created via secret plotting (conspiring) of invisible conspirators with malicious intentions. This is the basic CT assumption that varies regarding specific conspirators and plots (conspiracies).
2. There are no accidents or coincidences and everything is connected through the conspirators' master plan that is behind all major events in history.
3. CT disregards the principle of Occam's razor.

4. CT promoters are entitled to see the truth behind the observable, false reality.

5. Validation of CT is in evidence and causal connections that CT promoters provide, which typically deviates from authority/mainstream sources, and is to be taken at face value.

The first two propositions pinpoint the ontology of CT, while the others point to CT epistemology. Note that there can be other basic assumptions, for example, circles of alternative medicine may assume that there are no viruses and so there can be no virus-caused pandemic.

Ontologically, CT resembles some critical social science. Empirical reality is epiphenomenal, just a surface of a deeper reality where social causal forces operate. Critical social thought from Marx (Harambam & Aupers, 2021) through Frankfurt Circle's critical theory to Bhaskar's critical realism (1975, 1979) builds on a similar axiom of reality that is not empirically accessible. Social groups rooted in the economy constitute ontological agency that shapes true reality. CT also resembles economic and political thought that allocates agential power to the individual and tradition over any form of government. The laissez-faire physiocrats, political philosophy of conservatism (Burke, 1790, reprint 2009), and contemporary conservative economic and political theories altogether postulate a limited role of government. For CT promoters, the government is the hidden conspirator ("deep state") that is a priori mistrusted.

As already mentioned, this left-right arch was established in the literature. However, social sciences do not create CTs. Sociology drawing on the mentioned axioms stays shy of the conspiratorial aspect and attributes the agential character to social actors based on their roles in social structure. Political science recognizes conspiracy as a form of political organizing and action throughout history (Brutus's conspiracy in ancient Rome, America's Watergate, current military coups in the southern and eastern hemispheres, etc.). Yet, social science presumes that every conspiracy is embedded in a larger social context and that it represents a deviation from regularity rather than the regularity itself.

From the epistemological perspective, the salient characteristic of CT is a disregard for the principle of Occam's razor. According to it, a simpler explanation of an event is superior to more complex options. This translates into the scientific principle of parsimony. In contrast, CTs excel in complicating causal conjectures. For example, why seek causes to introduce the pandemic emergencies in a "deep state" or a global cabal when each health emergency declaration and policy measure has its publicly known signatories occupying formally designated posts in the government and health administration? Starting with these

visible individuals and organizations, the task of identifying a conspiracy would then consist of finding networking connections and shared agendas of these actors; this is the social science approach.

Practicing social science, however, does not attract CT promoters. Why spend hours of work in order to attest to the accuracy of a single statistic when a "theory" can be made in an instant by mixing up a few coinciding details and linking them to an arbitrary cause? I see restrictions on mass gatherings imposed by my government; I hate this and I do not trust the government; I conclude that restrictions are odd, cooked-up rules by the government to control me; I share my theory with blindfolded masses on social media. All CT promoters take such an easy path of cognizing. Speculation rules over investigation. Complimentary action is sharing their own or borrowed CTs since CT promoters believe that they are entitled to see the truth behind the observable, dull, false reality. Canadian cases are no exception and thus corroborate the literature (Hübl, 2020; Imhoff & Lamberty, 2017).

Further to the epistemic fallacy of CTs, the evidence selection is restrained to the CT discourse as CT Mill and Hyper Relay demonstrate. When a CT seems to be breaking out of this mold by being "scientific," they commit mistakes with regard to data accuracy and completeness (CT Mill and Busy Gunman). Authority and mainstream sources are discredited and ignored except as the target of criticism. CT promoters expect that their explanations are to be trusted at face value (Hyper Relay and Busy Gunman). What is the internal logic of these explanations?

CT promoters arbitrarily mix facts with fiction. Facts are supposed to provide credibility and legitimacy. Such facts are usually trivial denoting persons, locations, timing, and well-known events. For example, a lab for high-security virology research is located in Wuhan, China, the city in which the new coronavirus was first reported. Facts are, then, overlaid with fiction, which is broad-based, ranging from fabricated details to cause-effect constructions. For example, the Wuhan lab is where the new coronavirus was created and escaped from (two fabricated details that yet cannot be referenced to any credible source). The virus was created as a new biological weapon (a made-up cause) in order to increase China's military power (a made-up effect).

The arbitrary mix of facts and fiction making a CT is not only untenably eclectic but is also distorted by cognitive biases (Kahneman & Tversky, 1972, 1979). Indeed, CT promoters submit to a number of shortcuts in thinking and decision making. Quite apparent is the *anchoring bias*, the tendency to be men-

tally anchored in a historical precedent or some opinion and to adjust thinking to that anchor. CT promoters always loop back to their favorite pan-explanatory narrative, whether it is a plot by a government, Big Pharma, billionaires, geopolitical alliance, or extraterrestrial lizards in human shape that allegedly rule the world. The historical precedent is the initial exposure of a CT promoter to such a narrative, which could have aroused a rich psychological experience.

What keeps the CT promoter within the loop of a favored CT narrative is the **confirmation bias**. This is a tendency to seek only data/knowledge that confirms what one already believes is true. A pandemic skeptic looks for fringe medical sources that downplay the pandemic casualties, usefulness of masking, or quality of vaccines. Such sources confirm the skeptic's beliefs as the Canadian cases demonstrate. Furthermore, when CT promoters take persuasive action, they subscribe to the **framing bias** – packaging the informing content so as to elicit the expected response. CT promoters expect an endorsement of their views (Hyper Relay implies that everyone in the discussion shares the belief in a global cabal, while Busy Gunman gets angry when his followers appear idle).

Finally, the **representativeness bias** can explain the continuity in conspiratorial thinking. This is a tendency to base conclusions on an object's perceived similarity to the features assumed to be characteristic of some category. If "the deep government" staged the assassination of President Kennedy and the 9/11 attack on the World Trade Center, then it must have been involved in cooking up the pandemic hoax as well. While deducing the COVID-19 CT from the alleged evil-doing of the usual suspect, CT promoters neglect new relevant evidence that distinguishes three vastly different phenomena – an assassination event, an extraordinary attack by passenger airplanes, and a macro societal, global turmoil occasioned by a biological pathogen agent. This is yet another bias called **insensitivity to base rate**, which usually accompanies the representativeness bias (Travica, 2020b). Working in concert, these biases keep a conspiratorial mind entrapped so that, as Harambam and Aupers (2021) put it, the unbelievable becomes undeniable.

The nonsensical and false value of a CT helps in recognizing it. But what may be a procedure for detecting a CT? How could the 96% of Canadians, who were exposed to suspected incorrect online COVID-19 content (Garneau & Zossou, 2021), reliably determine their suspicions? How can half of them that shared findings without questioning the accuracy ensure that they do not propagate falsehoods? These questions, of course, are relevant beyond Canadian borders.

5.1. Detection procedure for conspiracy theory

Verifiability, testability, and falsifiability are the principles of scientific inquiry. Can a detail of a narrative or a claimed cause-effect relationship be verified in alternative, independent sources? Can a cause-effect relationship be tested by some formal methods? Can a stated cause-effect relationship be proven false or true by independent researchers? These criteria apply to scientific knowledge as the most reliable form of knowing. Science does not claim absolute truth. Its truth exists for the time being and under certain conditions; thus, truth is dynamic and prone to change with new learning.

It is rather unrealistic to expect people untrained in scientific inquiry to apply easily the three principles of scientific truth. Still, a basic caution regarding informing sources is part of ordinary decision making that people perform as citizens, customers, and patients. Indeed, in the Canadian survey, consulting other sources was the most frequent method used by 70% of the respondents (Garneau & Zossou, 2021). However, just 27% of them tried to check the credibility of the author/source.

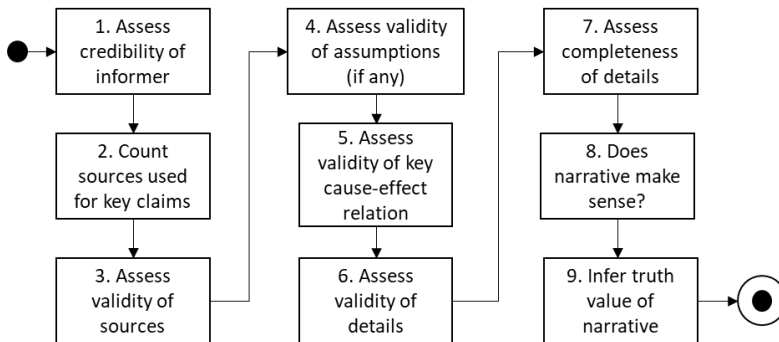**Figure 1.** Detection procedure for conspiracy theory

Figure 1 and Table 1 lay out a procedure that can be used for detecting a CT. The procedure checks the informer sources used to create a narrative; inquires about the validity of assumptions, details and the key cause-effect association; and probes whether the narrative makes sense. It draws on principles of scientific inquiry and other professions concerned with fact-finding (e.g., lawyers, journalists). It may not be possible or feasible to run this CT detection procedure in full. It may not even be necessary unless the informing client aims at establishing the definitive trustworthiness of an explanation. Still, a partial procedure suffices for a quick validation that may prompt seeking alternative explanations.

As an example of applying this procedure, consider the CT characterizing the COVID-19 pandemic as a hoax (Chossudovsky, 2022). Steps 1, 3, 4, 6, and 8 can be quickly performed; if so, a zero score follows and invalidates the CT narrative. The CT Mill's author is on CT lists, he cites CT sources, assumes that the government and its allies fabricated the pandemic (which has no confirmation in scientific sources), claims a cause-effect relationship unsupported in mainstream social science and cannot be tested and proven or falsified (the conspired pandemic subjugates people to conspirators' hidden interests), and operates with a single key detail as a proof for the alleged invalid declaration of the pandemic by the WHO. Provisionary scoring leaves possible just four points out of nine, which is already an unsatisfactory truth value. This should prompt a reader of Chossudovsky's article to drop it and seek other readings.

Table 1. Prompts for the procedure of detecting conspiracy theory

Step	Prompts	Scale 0, 1
1	Does the informer have a track record? Is there a match between informer's professional background and the topic discussed?	
2	Identify key claims in the informer's narrative and determine if there are at least two unrelated sources cited for each.	
3	Are the sources cited relevant for the narrative's topic? Is any source listed publically flagged as dubious?	
4	Are there basic assumptions behind the narrative and, if yes, do they pass step 3?	
5	What is the basic cause-effect relationship in the narrative? Does it make sense? Support – is it testable? Can it be proved or disproved?	
6	What are the key details in the narrative and do they past tests as in steps 2 and 3?	
7	Are there any obviously missing details? How important could they be for the credibility of the narrative?	
8	Do the narrative as a whole and its key parts (claims, assumptions,' basic cause-effect relationship) make sense?	
9	Sum up the ratings obtained in the preceding steps	N/9

6. Discussion

The three mini-cases discussed above provide some evidence of CT in the Canadian landscape. One of the CT promoters is the institutional actor Global Research which operates a website with over 20,000 articles and has been characterized as a superspreader of COVID-19 CTs. Its publishing policy is charted in the Global Research founder's e-book that is freely dispatched via the web-

site. Global Research promotes many COVID-19 CTs that cover the entire pandemic topic – from the virus origins to restrictions and their consequences. The alleged conspirators targeted are the Canadian government, WHO, pharmaceutical corporations, and influential individuals. Some pre-pandemic articles by Global Research have no association with COVID-19 and their role is unclear. The published articles have no or very few references. When provided, references link to sources residing within the CT landscape in Canada and elsewhere.

Global Research pretends a scientific approach. In reality, the key author Chossudovsky presents non-referenced, incomplete, and incorrect data in a crucial argument concerning the veracity of the pandemic. This is consistent with CT research, which established that conspiracy theorists resort to "pseudoscience" by citing "data," "research," "sources," and "experts' statements," while neglecting scientific research methods (Hübl, 2020). Global Research can be dubbed with the label that captures its generative role in the CT landscape – *CT Mill.*

The case of Canadian self-made anti-pandemic lobbyist Chris Sky suggests several findings. His guiding CT is straightforward although illogical as CTs inherently are: the Canadian government intends to increase control over people by making them economically dependent after destroying the national economy through pandemic restrictions. Elements of a CT are clear: the government conspirator is at the narrative nexus and the evil motives of the conspirator resulting in an artificial emergency regime. As it resembles the anti-government stance typical of the conspiratorial mind, Sky is not as original as CT Mill is; furthermore, he does not support his claims with references. He is a speaker preoccupied with public appearances.

Common sense is missing in Sky's narrative as in any other CT. If the government destroys the private economy, it will destroy the source of its own budget and collapse. Optionally, the government would have to nationalize the bankrupt firms, which amounts to a social revolution. Sky does not go that far in his narrative to reach such an absurd conclusion. The reach of Sky's CT is determined by the reach of his tweets via his account (suspended at the time of this writing), re-tweets and public appearances, and his website. Sky's tweets have met a half-hearted acceptance among Twitter users who are not associated with groups of pandemic skeptics/deniers.

Similar to Chossudovsky (2022), Sky operates with incomplete and partly incorrect data. In reference to his claim that more vaccination means more restrictions and more deaths, it is to be noted that Sky's "facts" do not hold. Of 10 Canadian provinces, Quebec's rank on the double vaccination is 6 – not the top one as Sky

claims – while its mortality/100,000 people pandemic indeed is the top as it has been throughout the pandemic. Alberta's rank on vaccination is the lowest as Sky stated, but it ranks fourth on the mortality rate – quite high and certainly not the lowest as Sky claims (Health Infobase, 2021). Based on the data from Health Infobase (2021) maintained by the Canadian government, the correlation between the vaccination and mortality rate for 10 provinces is –0.64. Therefore, the more vaccination, the fewer deaths, and vice versa. This finding is opposite to Sky's claim of the positive relationship between vaccination and mortality. Chris Sky can be dubbed with the label that points to his persistent, hostile activities – Busy Gunman.

The case of CT Star and the associated email-based discussion group offers additional findings. CT Star's actions match the other two actors in terms of goals and persistency. A difference is that CT Star's audience was quite limited. This CT promoter pushed pandemic skepticism via steady messaging in an attempt to influence the group participants. A larger picture CT Star conveyed reveals a fundamental CT belief that the world is a battleground between two opposing global forces, and that the COVID-19 pandemic is one result of this battle.

Adding the fact that CT Star mostly referenced CT sources, it is clear that this person's CT thinking and practice were not original, which is similar to Busy Gunman. Nevertheless, CT Star exhibited self-confidence in the truthfulness of the standpoint advocated inasmuch as Busy Gunman and CT Mill do. This is consistent with the literature that portrays CT activists as self-assured holders of a secret, exclusive knowledge enjoying a feeling of appearing special in contrast to others who are naïve and asleep in a dogmatic slumber (Hübl, 2020; Imhoff & Lamberty, 2017). The persistence and consistency in CT Star's dissemination of the CT content invite dubbing him *Hyper Relay*.

Similarities between these three CT promoter types are obvious. Hyper Relay demonstrated continuity in conspiratorial thinking bound to a global cabal tradition. Busy Gunman targeted the national government as the plotter behind the alleged pandemic hoax. CT Mill's conspiratorial mind views multiple global and domestic conspirators, such as WHO, the Canadian government, media, science, corporations, and influential and wealthy individuals. This is consistent with the finding by Brotherton et al. (2013) that conspiracist ideation forms a monological belief system based on basic convictions on conspirator types and their malevolent intentions toward harming and deceiving people. Finally, it is interesting that two opposed political orientations meet in mistrusting the government – the left-wing (CT Mill) and the right-wing (Busy Gunman and Hyper Relay). This arch has already been established in the literature (Hübl, 2020; Miller et al., 2016).

The second part of the study resulted in designing a model for verifying CT. It consists of a philosophical probing into the CT content and a practical procedure for detecting a CT. The philosophical insight reveals arbitrary ontological assumptions, epistemic *naïveté* and flaws, contorted and biased logic as landmarks of CT. It renders CTs incorrect by definition. CTs make no common sense but rather run against it. A pandemic skeptic/denier holds that governments of the world artificially increase statistics on COVID-19 cases and deaths. However, common sense would assume that governments try to do the opposite and minimize these figures because high casualties reveal their incapability of protecting public health. Or, consider the CT that claims that governments create the pandemic hoax in order to increase control over the people governed. Does it not make more sense that restrictions anger people and businesses, which altogether may decide to vote out the pandemic government in future elections? Is this not observable in street protests against pandemic restrictions that coincide with this writing? Why would any government shoot itself in the foot as CT promoters like CT Mill and Busy Gunman insinuate? Apparently, the claim makes no elementary sense.

Complimentary to the philosophy behind the CT verification model is the CT detection procedure developed as part of this study (Figure 1, Table 1). It contains nine steps, and it can be performed in a full or truncated fashion to probe the validity of a narrative on COVID-19 (or some other important event). Drawing on the principles of science and other fact-finding professions, the procedure checks the informer sources used to create such an explanation; inquires about the validity of assumptions, details, and the key cause-effect association; and probes whether the narrative makes sense. In contrast to psychometric approaches, this procedure takes a pragmatic, informational angle.

The model for verifying a conspiracy theory has implications for decision--making theory. The assumption behind this model is that cognitive heuristics lead to biases (systematic errors) in judgment (Kahneman & Tversky, 1972, 1979) and underpin conspiratorial decision making. It originated from the cases studied.

Figure 2. Optimal and satisficing decision making
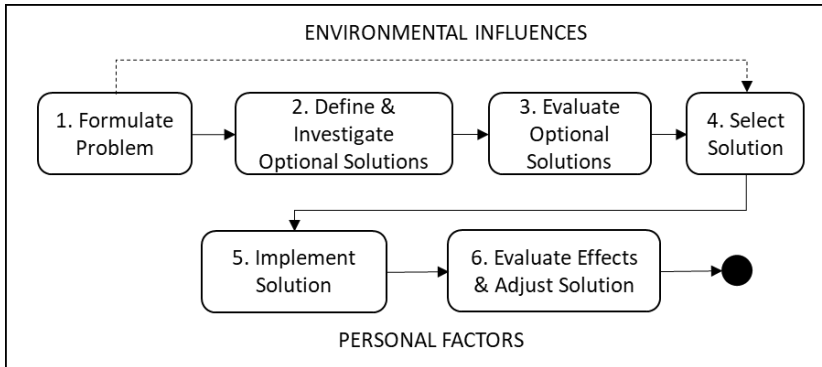
All the three CT promoter types discussed presume some deep conspiracy (anchoring bias), then seek evidence to confirm this presumption (confirmation bias), routinely conjecture similarities between new events and their presumption (representativeness bias and insensitivity to base rate), and habitually shape their persuasion toward advancing their narrative (framing bias). According to heuristics theory, biases work automatically. Consequently, decision making of the CT promoter types is consistently biased, running in a vicious, conspiratorial circle. The Rumor Mill type exhibits these biases most comprehensively and systematically, while Busy Gunman and Hyper Relay excel in the framing bias. This automatic cognitive processing (Kahneman, 2002) makes a demarcation line between CT and propaganda which is created intentionally for the purposes of public relations in political and economic domains.

Situational uncertainty combines with "bounded rationality" to push decision making toward a sub-optimal model (Simon, 1956). The model results in decisions that are "satisficing" ("good enough") rather than optimal. In Figure 2, satisficing decision making is represented by the steps connected via dashed lines. In contrast, solid lines connect steps of optimal decision making (Simon, 1947/97), which is longer. Both decision making processes are subject to influences of personal factors pertinent to a decision maker (professional and experiential knowledge, ideology, cognitive biases) as well as various influences from the environment (private, professional, social). The difference is that optimal deciding reduces the room for subjectivity and error via the investigations of multiple informing sources, an objective (or at least consensual) evaluation, and a ranking/selection of the end-solution with formal methods. Contrary, the satisficing model has no such constraints and thus is predisposed to systematic and random errors.

Small and possibly opportunistic evidence, a single opinion or advice, a piece of rumor – any of these may become a solution to the problem at hand, that is, the decision that is readily implemented. As discussed in this article, a deeply engrained mistrust in authorities can be a personal factor providing instant verdicts to imposed pandemic control policies. In such a scenario, a single-criterion satisficing decision making is at play (Busy Gunman and Hyper Relay). It is possible that multiple personal and environmental sources influence the decision-maker, as the case of CT Mill demonstrates. In that scenario, multi--criteria satisficing decision making plays out. Either variant of this sub-optimal deciding can take place in different contexts, from the individual to group and organizational ones, and so in health administration, politics, business, and private life. To be sure, people who do not spread CTs also resort to the satisficing model. They can trust authorities and a single proclamation of a new policy can make these people turn it into the decision guiding their behavior. In general, the easiness and efficiency of the satisficing model as well as a perceived reduction of uncertainty it provides make it broadly appealing.

The CT verification model and particularly its CT detection procedure (the procedure) can augment both the optimal and sub-optimal decision making processes. Focusing on Figure 2, assume that the problem is defined in step 1 as "How to defend against COVID-19?" In step 2, the procedure can assist in validating solutions offered via publicly communicated policies and social media/private channels. These solutions may include social distancing, facial coverings, taking natural remedies (e.g., cow urine), taking repurposed medications (e.g., Hydroxychloroquine), and doing nothing. Investigating the pros and cons of each option would feed into step 3 (evaluation), with a possibility of quantifying the options in some way. Then, an objective ranking of the of these, pushing the best option to the top, follows up in step 4. This process could result, for example, in concluding that simpler options, like the first two listed, are superior to more complex and riskier remaining options. Knowledge, data, and time are likely limitations to the applicability of this optimal decision making. Still, the procedure can also help even if a decision-maker jumps in a nondeliberate fashion to just one option once it presents itself. The procedure, then, resembles the investigation and evaluation steps of the optimal process in a nutshell. If the solution's score turns out low on the 1-9 scale, it gets discarded and a new one is sought. Table 2 summarizes the discussion in this section.

Table 2. Three types of conspiracy theories promoters

Issue	CT Mill	Hyper Relay	Busy Gunman
CT topic	Very broad, including COVID-19	Broad, including COVID-19	COVID-19
CT dissemination	Website publishing	Email	Public speech, social media
Alleged conspirator; Motivation (behavioral cause)	WHO, corporations, billionaires, Canadian government, media, science; Attributed motives	Global plotters with deep historical roots; Attributed motives	Canadian government; Attributed motives
Evidence used	Arbitrary, incomplete, partly incorrect		
Logic	Contorted, biased via cognitive heuristics, violating common sense and Occam Razor principle		
Political leaning	Left	Right	Right
Originality	Yes	No	No
Decision making model	Multi-criteria satisficing	Single-criteria satisficing	Single-criteria satisficing

7. Conclusions

The study provided limited insight into the Canadian CT landscape. Looking more comprehensively at pandemic skeptic/denial groups on Twitter and other social media could have provided a richer picture although not substantially different. Still, the insight provided amounts to three instances of CT promoters, two individual and one institutional. Similar in persistence, they differ in visibility, CT originality, and reach. CT Mill, Busy Gunman, and Hyper Relay have traits that corroborate the academic literature on CTs (Brotherton et al., 2013; Burki, 2020; Douglas, 2021; Harambam & Aupers, 2021; Hübl, 2020; Imhoff & Lamberty, 2017; Mannan & Farhana, 2021; Rutjens et al., 2021). Therefore, the study has a confirmatory contribution. As these three may typify the conspiratorial opposition to efforts of confronting the pandemic, the study also contributes to extending this literature. These contributions are likely to reach beyond the Canadian context. Future research may test whether these CT promoter types are universal. Furthermore, the conceptual part of the study created a model for CT verification. Its purpose is to contribute to cracking CT narratives in the literature and practice. The model can be considered incipient in character, awaiting further refinement through conceptual and empirical research.

The identified resemblance of COVID-19 CTs to the philosophical thought on both the left and the right wings within a generic Western political spectrum confirms the literature. The term "resemblance" is intended here to emphasize

that CTs are indeed created outside of the theory domain and have no anchoring in formal philosophy and social theory. And so, Both Busy Gunman and Hyper Relay resemble the extreme right-wing thought, while CT Mill resembles the extreme leftist thought. The criterion for differentiation is the type of the speculated conspirator – the government vs. wealthy persons and corporations. This certainly is an interesting issue and an important one with regard to recognizing CT as the meeting point of the extreme rightist and leftist thought. This problem may position future research.

The CT verification model can contribute to research on judgment under bounded rationality and uncertainty, which belongs to decision sciences/theory of decision making. Situational uncertainty combined with bounded rationality (Simon, 1956), prompts people to resort to heuristics (biases) in making judgments (Kahneman & Tversky, 1972, 1979). Decision making is akin to Simon's (1956) "satisficing" ("good enough") process. The procedure for detecting CT can augment the satisficing decision making; it can also augment the optimal deciding process under uncertainty. Implications for practical decision making are possible across settings.

The focus of the methods for the identification of COVID-19 CTs is on validating inputs into the existing decision making processes. As for a decision-maker in business, when companies are allowed to decide how to fill in specific anti-infection measures, the board of directors needs to be able to distinguish between rumors and medical facts. For example, when employees share the physical workspace, it is important to recognize and block a rumor that COVID-19 is just like the flu for most people but old age groups (a variant of the pandemic-denying CT). A fact that surfaced early in the early pandemic was that meat processing/packing plants in Canada (particularly in Alberta) were one of the infection clusters, although just around 12% of workers were over 45 years of age according to 2017 figures (Zhang et al., 2021).

Public administration at the municipal level affects many aspects of business and private life during a state of a health emergency. The officials' understanding of the pandemic flow sets the filters for decision making inputs. For example, it is crucial to maintain control over long-term care facilities because these house residents share physical spaces and the nursing staff, while often suffering from a compromised immune system and comorbidities. Even a slight influence of the CT that equates COVID-19 with the flu may incapacitate a public administrator in understanding the nature of COVID-19 and imposing appropriate hospital-grade protections in these institutions. Over 40% of COVID-19

morbidity in Canada occurred in such institutions, notably in Quebec and Ontario (CIHI, 2021), in spite of the officials' repeated swearing to protect "the most vulnerable among us."

Public health management is in hands of medical authorities at the national and global levels. Such a concentration of medical authority is less susceptible to COVID-19 CTs. Still, validating decision inputs matters. The already cited decision of WHO to avoid naming the new disease a variant of SARS amounted to a framing heuristic with possibly serious consequences. Next, WHO's initial 2020 advisory on applying facial coverings exclusively in the hospital setting resembles insufficiently informed decision making or groupthink (Schippers & Rus, 2021). For example, Taiwan's strategic plan for confronting the influenza pandemic advises the use of masks extensively across social settings (CDC Taiwan, 2012). WHO neglected this and similar plans and misled national disease control centers that mirrored the WHO's no-masking advisory, thus propagating the effects of insufficient defenses against the airborne virus. For example, Canada's chief epidemiologist kept repeating the no-masking advice and the Canadian government even supplied masks to China when the pandemic was just starting in Canada; once the advisory was reversed, Canada lacked masks (MacCharles, 2020; Noonhout, 2020).

This study framed CT beyond the literature-based definition it started with. A CT is a false, arbitrary mix of facts and fiction with a speculative cause-effect relationship rooted in the assumption that the world is shaped by conspiracies visible just to self-proclaimed knowers. Given all the inherent falsehood, the word "theory" in "conspiracy theory" is a misnomer. CTs do not belong to any sort of theorizing as they explain nothing and cannot predict anything. Likewise, creators and disseminators of CTs are not "theorists."

CTs can also be likened to folkish storytelling and entertainment in the ordinary state of affairs. This form is not crafted by writers but by individuals and groupthink processes inundated by arbitrariness and cognitive heuristics. This storytelling form and practice become dangerous in the state of a global public health emergency, particularly when they undermine this emergency. In the CT-based worldview, the conspiracy is total because outsiders are viewed as conspirators against CT believers. CT thinking is adamant, passionate, and obsessive, as Canadian cases indicate. For these reasons, a rational dialog with CT promoters may not be possible. Still, the falsehood of their narratives ought to be exposed.

It is important to differentiate the spreading of CTs from a public debate that includes questioning policies and authoritative decisions. Such a discourse is a condition for a democratic society. But the debate needs to respect certain ground rules. In particular, while individual freedoms are precious, living in an organized society presumes understanding that these freedoms cannot be absolute since coexistence with others implies limitations backed by rules. In a public health emergency, in particular, balancing individual freedoms with social responsibility is necessary (Travica, 2020a). CT promoters disqualify themselves from the democratic public debate proportionally to their rejection of any limits to individual freedoms.

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