COVID-19 CONSPIRACY THEORIES IN CANADA: KNOW, CRACK, KNOCK

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ABSTRACT

Aim/Purpose	This study explores the dissemination of COVID-19 conspiracy theories in Canada in order to create a model for verifying conspiracy theories.
Background	The study combines empirical and conceptual research.
Methodology	Three Canadian cases of conspiracy theories dissemination were developed via observation and content analysis, and an exploration of ontology, epistemology, and logic of conspiracy of conspiracy theories was conducted.
Contribution	The study contributes to understanding conspiracy theories related to COVID-19 and possibly beyond.
Recommendations for Practitioners	Findings can help in detecting COVID-19 conspiracy theories.
Recommendations for Researchers	Findings can help understanding the nature of conspiracy theories.
Impact on Society	Identifying COVID-19 conspiracy theories helps in managing public health communication and informing, uncertainty, and mass behavior during public health emergency.
Future Research	More research on COVID-19 is needed in different social contexts internationally as well as on validating the proposed model for verifying COVID-19 conspiracy theories.
Keywords	conspiracy theory, COVID-19, misinforming

INTRODUCTION

The COVID-19 pandemic generated a new communication universe. Numerous informers have targeted masses of informing clients; many of these informers act as relays between primary sources and clients. Conspiracy theory (CT) promoters (CT "theorists") are one of these visible informing actors. They spread skepticism about authenticity of the pandemic and 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, 2020).

Old mass media, new social media, Internet-based publishers, and politicians have been involved in the current CT pandemonium. Mass confusion erupted as some high profile public figures ascertained that COVID-19 is just another variant of common flu. Confusion was sowed even by the World Health Organization (WHO) that initially refrained from naming the virus with the label "SARS" (it was called "2019-nCoV" before renaming it into "SARS-CoV-2"); allegedly, WHO wanted to prevent a mass panic (WHO, 2020). Fear and equally affective rage against mistrusted authorities and media also filled public discourse internationally. Anti-maskers, antivaxxers, and other "freedom" movements targeting pandemic emergency regimes filled social media, and private and public spaces until the moment of this writing (Al Jazeera, 2022; The Associated Press, 2022; CBC News, 2022; Tasker, 2022; Wikipedia, n.d.b).

The phenomenon of CT is not new (Barkun, 2013) but is has got rejuvenated as energy of CT promoters has focused on COVID-19 as the subject since 2020. Academic researchers in some disciplines promptly turned to investigating CTs associated with COVID-19 (Burki, 2020; Douglas, 2021; van Bavel et al., 2020). This study explores the dissemination of COVID-19 CTs in Canada in order to create a model for CT detection. It is important to understand public informing aspects in the pandemic time, particularly against the backdrop of unsettling evidence. A survey found that 96% of Canadians were exposed to online COVID-19-related content they suspected as being incorrect. Only 20% of the respondents always checked the accuracy of such a content, while 50% shared it without checking its accuracy (Garneay & Zossou, 2021).

LITERATURE BACKGROUND

CTs have long attracted masses and resided in public discourse everywhere (Barkun, 2013; Uscinski, 2018). CTs cover an astonishing topical scope, including health, everyday life, politics, science, public personas, groups, organizations, and science fiction subjects (Wikipedia, n.d.a). They usually thrive in the time of uncertainty (Romano, 2020).

Well-known philosopher Karl Popper (1945) discussed "conspiracy theory of society" in a way 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 Advanced Learner's 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, truthfulness of CT is dubious and subject to verification, except for apparently nebulous CTs (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. The old and new media have been deeply involved. Government and medical authorities have been quite visible and taken a significant portion of mass media time. The role of some high-profile politicians in several countries has been noted in the literature (Germani & BillerAndorno, 2021; Romano, 2020; Tollefson, 2021). Some CT sources have been 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; Garneay & 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 (plot, conspiracy) (Harambam & Aupers, 2021).

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). Visible personas in the context of the pandemic are also the target of CTs, such as lead epidemiologists and philanthropic investors in vaccine research (Cassatta, 2021). 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 (Cassatta, 2021; Hamel et al., 2021).

CTs in general have been studied from the perspectives of antecedents, adoption propensity, and effects (Butter & Knight, 2020; Robertson, 2015; Rutjens et al., 2021). CT research is presently shifting toward COVID-19. Still, gaps in it are significant due to the novelty of the topic. This study focuses on the problem of detecting a CT. This problem is new and it has a research aspect as well as a practical one. How can a CT be identified? What aspects should be evaluated? 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.

METHODOLOGY

The research problem of the study refers to creating a model for CT verification. 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 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, 2021; Oxford Advanced Learner's 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 the 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. Results of this will be presented as mini-cases.

Methods involved content analysis and observation with participation. The unit of analysis was topical content. The latter applied to the discussion group. This 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 participants had a mutual relationship. All participants had 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.

The conceptual part of the study involved an exploration of ontology, epistemology and logic of CTs by using standard methods of analysis and synthesis, and the framework on decision-making heuristics by Kahnemann and Twersky (1972).

CONSPIRATORIAL MINDS IN CANADIAN LANDSCAPE

CT sources are numerous, ranging from occasional promoters to systematic ones and "superspreaders" (Klepper et al., 2021). Klepper and associates cite 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 Centre for Research on Globalization/Global Research is located in Canada, it is included in the empirical investigation part of the study.

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 "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 a publication date, and a content brief. 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 geopolitical topics and often country-specific.

The Global Research COVID-19 topics surveyed fall into several rubrics: vaccines evaluation, 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 industry engaged in vaccines research is criticized for prioritizing commercial interests over public health protection. The media coverage has also attracted criticism of 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 plotting of the Canadian (and other) government(s), pharmaceutical companies that produce vaccines, and mainstream media. These conspirators keep citizens a hostage of 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 writings of the founding father of Global Research. Chossudovsky (2022) argues that the declaration of the worldwide public health emergency by the World Health Organization (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 "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 it is around 68,000 (Johns Hopkins University, 2020; Worldometers, n.d.). 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, 2020b). 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 (2020-22) 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 at 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.

The Planet Today defines itself as a Web publisher of "alternative news," whose mission is "to empower consumers with factual information." The publishing declaration claims that the source covers holistic health, nutritional therapies, consciousness and spirituality, permaculture, animal rights, environmental health, and other areas. Specific rubrics include space, UFO, mysteries of history, anomalies, conspiracies, crash, supernatural, spirituality, cryptozoology, health, medicine alternative medicine, natural medicine, geopolitics, and science. The editor points out that "alternative news organizations," such as Infowars.com, Naturalnews.com and Zerohedge.com, frequently copy Planet Today's content.

The coverage of the Off Guardian includes COVID-19 in addition to various political topics. The Off Guardian preamble states that it took its name from "the fact its founders had all been censored on and/or banned from the Guardian's 'Comment is Free' sections" (A British left-leaning newspaper). Covering different angles and opinions is a stated goal. The COVID-19 coverage of the Off Guardian for the most part casts doubt on the pandemic reality as portrayed by the mainstream media as well as on the protective measures including vaccines.

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

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 of 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.

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 sports aviator sunglasses over his tirelessly smiling face, bleached and groomed hair, tattoos, and A-shirts inscribed with "Just say NO" and revealing his body-builder musculature. He speaks fluently and behaves naturally before cameras and spectators. His language appears accessible to the audience, but it may contain vulgarities when he scolds his rally goers for being inactive and blindfolded. High profile personas are not spared. In a recent video, his obscene rhetoric targeted Canada's Prime Minister for hiding before Canadian truckers protesting the mandated vaccination (Sky, 2022). In Canadian culture, this is a deviant behavior.

In his tweeted videos, Sky consistently communicates an intention of undermining pandemic restrictions. During the earlier stages of the pandemic, he put much effort in organizing anti-masking rallies staged across Canada. In doing so, he violated the rules for size limits on outdoors groups, which in Canada have varied from single to double digits. His rallies gathered hundreds of anti-maskers and pandemic skeptics/deniers. These breaches moved law enforcement authorities to arrest and expel Sky from Canada's provinces in which he rallied. Another direction in Sky's fighting social/physical distancing was his initiative for establishing "private on-demand schools" in which children would not have to wear masks. He organized fundraising for this purpose via the Facebook group Mothers Against Distancing and a GoFundMe campaign (DiMatteo, 2022). Evidence on the effects of this initiative is uncertain.

When the vaccines were introduced, Sky took on these as his key target. Characterizing vaccines as harmful, he campaigned for rejecting them. In a retweet coinciding with this writing, Sky argues that more compliance with restrictions leads to more restrictions. He claims that the province of Quebec has the highest vaccination rate and the highest number of deaths, while Alberta is the lowest on both counts (Sky, 2022). His thesis is incorrect and the figures he cites are just partly correct (more below).

In one tweeted video, Sky is interviewed to explain motives behind his fight. Consistent with CT thinking, he alleges that the government artificially created the health emergency and is therefore the conspirator of the pandemic. The government intends to destroy business and, consequently, people's livelihood in order to control people (malevolent intention). When businesses are destroyed, people become dependent on the government for the paycheck (the causal connection between the conspirator and restrictions on conducting business). Consequently, the society transforms into a "government class" and "slaves" that work for the government (Andrew Does, 2021).

The number of views of CS's videos varies from dozens to thousands. Interestingly, however, readers' comments are more often critical than supportive. For example, one tweet stated:

> 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. (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.

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 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 trust instead the intelligence and military sources 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 a firm proof of 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 a 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 this person's ideas.

CT Star never came with a fully developed 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 labelling 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 toward 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 geopolitical cabal allegedly responsible for the COVID-19 pandemic, and acted within a small group discussing COVID-19 in order to spread pandemic-related CTs.

DISCUSSION: CANADIAN CONSPIRACY THEORY LANDSCAPE

The three mini-cases discussed above provide some evidence on CT in the Canadian landscape. One of the CT promoters is the institutional actor Global Research that operates a website with over 20,000 articles, which 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 website. Global Research promotes many COVID-19 CTs that cover the entire pandemic topic – from the virus origins to restrictions and their consequences. Some pre-pandemic articles have no association with COVID-19 and their role is unclear. The published articles have no or a very few references. When provided, references link to sources residing within the CT landscape in Canada and elsewhere. Global Research exudes a tendency of appearing scientific. However, 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 found that conspiracy theorists resort to "pseudoscience" by citing "data," "research," "sources," and "experts' statements," while neglecting scientific research methods (Hübl, 2021). 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 driving 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 its evil motivation of the conspirator resulting in an artificial emergency regime. As it resembles the anti-government stance typical for conspiratorial mind, Sky's 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 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 not associated with groups of pandemic skeptics/deniers.

Similarl to Chosudovsky, 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, 2022). Based on the data from Health Infobase maintained by the Canadian government, the correlation between the vaccination and mortality rate for 10 provinces is -0.64. Therefore, the more vaccination, the less 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 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).

CT Star demonstrated a continuity in CT thinking by believing in a global cabal tradition and by extending the conspiratorial thinking to the former American President Trump. This is similar to CT Mill's conspiratorial mindset. Their pandemic skepticism and opposition to the emergency regime are just an instance of a consistent understanding of the world as shaped by conspiracies that only they can see. 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). This arch has already been found in the literature (Hübl, 2020; Miller et al., 2016).

CT Star can be dubbed with the label that signifies its steady forwarding of the CT content to the discussion group – *Hyper Relay*.

TOWARD A MODEL FOR VERIFYING/DETECTING CONSPIRACY THEORIES

The second research question inquires about design of a model for CT detection. This task has philosophical underpinnings and ventures into the domain of behavioral decisions making. Let us start from postulates that can be derived from 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 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) and contemporary conservative economic and political theories altogether postulate a limited role of government. For CT promoters, government is the hidden conspirator ("deep state") that is a priori mistrusted.

As cited above, 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 this principle, 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 introducing 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 for 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 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. It is also distorted by cognitive biases (Kahneman & Tversky, 1972, 1979). Indeed, CT promoters submit to a number of shortcuts in thinking. Quite apparent is the *anchoring bias*, the tendency to be mentally 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.

CT promoters reside within loop of a favored CT narrative due to 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 to elicit an 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, 2020a). Working in concert, these biases keep a conspiratorial mind entrapped so that, as Harambam and Aupers (2021) put it, the unbelievable becomes undeniable.

Given its arbitrary ontological assumptions, epistemic naïveté and flaws, and contorted and biased logic, CTs are incorrect by definition. Also, they make no sense but rather run against common sense. 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 not this observable in street protests against restrictions and the responsible governments, which we witness these days? Why would any government shoot itself in the foot as CT promoters insinuate?

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. Rather, CTs make a form of ungrounded subjective thinking. CT can also be likened to folkish story telling. With imagined details and outlandish causal conjectures, a CT comes across as a fairy tale crafted not by literature writers but by actors vested with various personal and institutional interests.

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 (Garneay & 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.

DETECTION PROCEDURE FOR CONSPIRACY THEORY

Verifiability, testability and falsifiability are the principles of scientific inquiry. Can a detail of narrative or a claimed a 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, prone to change with new learning.

It is rather unrealistic to expect from the people untrained in the scientific inquiry to apply easily the principles of scientific truth. Still, a basic caution regarding informing sources is part of ordinary de-

cision 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 (Garneay & Zossou, 2021). However, just 27% of them tried to check credibility of the author/source.

Table 1: Detection Procedure for Conspiracy Theory

Step No.	Evaluation Aspect	Prompts	Scale 0, 1
1	Credibility of the informer	Track record? Match between informer's background and topic discussed?	
2	More than 1 source used for key claims	Identify key claims and count sources for each	
3	Validity of used sources	Any on a CT list? Source relevant for the topic?	
4	Validity of assumptions (if any)	Credible citations? Any subjective, unsupported claims?	
6	Validity of key cause-effect relationship	Does it make sense? Support in mainstream scientific sources? Testable? Falsifiable?	
7	Validity of details	Verified across sources? Any fabrications? Their roles in the narrative?	
8	Completeness of details	What else can be part of the topic?	
9	Making sense as whole narrative	Logical implications and consequences?	
End	Overall narrative's truth value		N/9

Table 1 shows a procedure for determining whether an informer (a person communicating about an important topic) spreads a CT. It checks the informer's sources used to create a narrative, the quality of the details involved and of the suggested cause-effect relationship, and it probes whether the narrative makes sense. Overall, the procedure delivers a truthfulness value ranging from 0-9. The procedure draws on research principles of the scientific inquiry, which are also present to various degrees in some other professions (librarians, lawyers, investigative journalists). It may not be always possible or feasible to run this whole procedure. It may not even be necessary, because even a partial procedure can provide a low score that has no room for increasing, thus indicating a CT.

As an example of applying this procedure, consider the CT characterizing the COVID-19 pandemic as 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 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 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.

CONCLUSION

The study provided a limited insight into the Canadian CT landscape. Looking more comprehensively at pandemic skeptic/denial groups at Twitter and other social media could have provided a richer picture although not substantially different. The insight provided amounts to three instances of CT promoters, two individual and one institutional. Similar in persistence, they differ in the visibility, CT originality, and reach. CT Mill, Busy Gunman and Hyper Relay have traits that corroborate the academic literature on CTs. Therefore, the study has a confirmatory contribution. As these three may

typify the conspiratorial opposition to efforts of confronting the pandemic, the study potentially contributes to extending this literature. These contributions are likely to reach beyond the Canadian context. Future research may test these three types of promoting CTs. The study also delivered a model for verifying a CT. It consists of a philosophical probing into a CT content and a practical procedure for detecting a CT. The proposed model may contribute to cracking CT narratives in the literature and practically. The model can be considered incipient in character, awaiting further refinement through conceptual and empirical research.

A CT should be openly called for what it 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 prophets. The prophets are false as are their prophecies that explain nothing and cannot predict anything in the social world. It is important to differentiate 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.

Balancing individual freedoms with social responsibility is necessary. A citizen cannot arbitrarily decide whether to stop or not on the red traffic light in an intersection, without endangering others and violating the pertinent traffic rule. In extraordinary situations, limitations to freedoms may expand temporarily, thus affecting the balancing issue. By the traffic analogy, an intersection may be completely blocked off for traffic, and drivers must comply with the prohibition. However, CT promoters request an absolute freedom of choice in the highly sensitive context of public health. They reject the normal, democratic discussion as well as temporary larger limits to individual freedoms. Not only do they want to be heard, but also to impose their minority will onto the rest of society.

Given their outlandish, invalid logic discussed in this article, CTs can be characterized as a form of folkish storytelling and entertainment. CT sources are not readily visible, unless their creators are publicly exposed, such as Global Research's CT Mill. It is possible that some CTs originate in political and economic sources of propaganda and get infused into folkish storytelling. In any case, this communication and informing practice becomes 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, obsessive, passionate, and possibly even fanatical, as Canadian cases indicate. For these reasons, a rational dialog with CT promoters may not be possible. Instead, they need to be decisively confronted and their narratives openly criticized and discarded. The detection model proposed in this article may help in recognizing CTs, COVID-19 related in particular but possibly others too, which is the first step in one's deliberation and action.

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