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# What conspiracy theories circulated on Twitter during the first wave of Covid-19 in France?

*Marc Tanti*<sup>1</sup>

**ABSTRACT:** The Sars-Cov2 virus emerged in China in the Wuhan market on November 16, 2019. It quickly spread around the world causing the Covid-19 pandemic. Many epidemics that took place before this pandemic have been the source of many misinformation, conspiracy theories, post-truths and fake news. Our article aims to analyze the conspiracy theories that circulated on Twitter from March 1, 2020 to June 29, 2020 during this pandemic. Our methodology was qualitative. In particular, an interpretative descriptive analysis methodology was applied. The analysis data was extracted from Twitter with the Radarly® software. This tool permits to represent results in several forms (graphs, maps, clusters, etc.) and makes it possible to identify “influencers” and thematic of conversation. Our study highlights the circulation of numerous conspiracy theories. For example, in many tweets, the coronavirus would be an invention which would serve as a diversion and allow the discreet installation of 5G equipment. In our study, we can also cite the circulation of numerous fake news. For example, we can report the often relayed fake news of a virus manufactured in a laboratory. In conclusion, our analysis highlights during the Covid-19 epidemic, with the advent of the social web, conspiracy theories and fake news found a unique “breeding ground” for propagation. The boundaries of digital have become more and more subtle because manipulations have become more and more effective and have become invisible across these boundaries and in this cyberspace, where our privacy no longer belongs to us.

**KEYWORDS:** Covid- 19; Twitter; conspiracy theories

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## INTRODUCTION

The Sars-Cov2 virus emerged in China in the Wuhan market on November 16, 2019. It quickly spread around the world crossing sea, land and air borders to cause the Covid-19 epidemic which was global and unprecedented. Scientific data on the virus and the disease quickly spread in cyberspace across digital borders, but also manipulated data and fake news. Their diffusion was significant through social networks.

Between reliable information, disinformation, post-truth or fake news, the digital frontiers have become, with the advent of this epidemic, subtle because tricks and manipulation have become more and more effective in making themselves invisible across these borders and into cyberspace.

A certain number of international studies have analyzed the diffusion of disinformation messages on the web during this epidemic.

For example, we can cite Wasim's study which analyzed the 5G conspiracy theory based on a content analysis of Twitter data over a period from March 27, 2020 to April 4, 2020, using the hashtag #5GCoronavirus (Wasim, 2020).

We can also cite the work of Kouzy who analyzed 673 information tweets whose scientific validity he verified. The author highlighted that 24.8 % of the tweets collected were disinformation and 17.4% contained unverifiable information (Kouzy et al., 2020). In this work, Kouzy concluded that medical misinformation about the epidemic was spreading at an alarming rate on social media and was having health, social and societal impacts.

This wave of false or misleading information on social networks also gave birth on February 2, 2020 to the concept of infodemic by Tedros Adhanom Ghebreyesus, director general of the World Health Organization (Mesquita et al., 2020).

Our article aims to present in a first time the dissemination of conspiracy theories that circulated on the social network Twitter from March 1, 2020 to June 29, 2020 via an analysis of tweets collected during

this period. In a second time, we will discuss the practical implications that could emerge from our work.

But before describing the research methodology and the results, we will first attempt to define the concept of conspiracy theory and what differentiates it from the concept of fake news.

## **STATE OF THE ART**

Attempt to define the concept of conspiracy theories

Conspiracy theories have emerged more or less spontaneously in the public space in recent years, particularly following the attacks in Paris and Brussels (Giry, 2017). Also, it is not surprising that an epidemic of such magnitude as Covid-19 is at the origin of such phenomena. We can also note that conspiracy theories, although old phenomena, have for several years been the subject of particular attention, and even competition, in France, particularly between journalists, researchers and scientists and, finally, public authorities and professionals of politics

As for the French and European academic fields, beyond their pioneers, they are also crossed by an interdisciplinary vitality on this question and which brings them closer to the Anglo-Saxon world where “conspiracy theories” have been an object of study since the years 1960 at least (Butter & Reinkowski, 2014). This is reflected, for example, in the establishment of the “Comparative Analysis of Conspiracy Theories” action in 2016 or the holding of a thematic workshop during the annual congress of the French political science association in 2017 (Freiman, 2019). In addition, since 2010, journals such as *Science and Pseudo-science*, *Agone*, *Raison Publique*, *Esprit*, *Diogenes*, *Emulations* have published on conspiracy.

According to Fenster, conspiracy theories firstly reflect conviction profound, both deterministic and essentialist, that an “omnipotent group or individual, navigating on the margins of society, secretly controls, in whole or in part, the political and social order” (Fenster, 1999).

## **DIFFERENCE WITH THE CONCEPT OF FAKE NEWS**

Popularized by Donald Trump during the 2016 electoral campaign to qualify his opponents and also the newspapers which are critical of him, the formula of “fake news” has spread through social networks and the media from year 2017, reaching peak attention in 2018.

If the expression “fake-news” is the one that is found in current vocabulary, it is interesting to look at its official translation decided by the Commission for the Enrichment of the French Language: “inforx” (Ministère de L’Éducation Nationale, 2018)

Thus, the French Official Journal specifies the definition of this new phenomenon as: “false or deliberately biased information, spread for example to favor one political party to the detriment of another, to tarnish the reputation of a personality or a company, or to contradict an established scientific truth.” (Ministère de L’Éducation Nationale, 2018).

Far from being limited to the political domain alone, fake news would therefore contaminate the entire public space, attacking the reputation of individuals or brands as much as scientific facts (Allard-Huver, 2023).

The Anglo-Saxon expression “fake-news” specifies the notion of “falsity” of information, it does not necessarily imply negative intentionality. Indeed, many commentators on “fake news” insist on the need to differentiate between misinformation, i.e. the unfortunate sharing of incorrect information, and disinformation, i.e. mean the deliberate creation and sharing of false information (Wardle, 2017).

## **METHODOLOGY**

This article follows a qualitative analysis methodology. In particular, for a better understanding of the situations encountered where the description of phenomena is essential, an interpretative descriptive analysis methodology is applied (Gallagher & Marceau, 2020).

The analysis data was extracted from the Radarly® software which allows you to record publications on social networks. The software also

makes it possible to draw qualitative and descriptive data. The tool is designed and marketed by the company Linkfluence (<https://radarly.linkfluence.com>) and operates in SAAS mode. The program is accessible online by paid subscription and allows us to collect data from Twitter, Facebook, Instagram, forums, blogs, etc.

The Radarly® software permits to represent results in several forms (graphs, maps, clusters, etc.). It also displays information about the tone of posted messages. It makes it possible to identify “influencers”, people or groups who intervene on a given subject or theme. Finally, it allows the export of data in .csv format to derive statistics. Data mining was mainly focused on Twitter. The period of extraction was from March 1, 2020 to June 29, 2020 (during the first epidemic wave in France). The social network Twitter has an important penetration rate in France during this period. Indeed, according to Business Insider FR on April 30, 2020, the number of daily Twitter users increased to 166 million during the first quarter of 2020, with an increase of 24% compared to the same period of 2019.

The languages questioned were mainly French and English.

A content analysis exploiting the inspection and knowledge representation functionalities offered by Radarly® was carried out. This analysis methodology makes it possible to identify information concerning the epidemic in the “torrential flood” of tweets (Negura, 2006).

To theoretically anchor this approach, the term “content” designates the information transmitted through discourse (Mainguenau, 2009). The Palo Alto school contrasts it with the term “relationship”. We thus distinguish two types of content: manifest content and latent content, borrowed from the field of Freudian psychology. Manifest content is what is explicitly expressed: opinions, beliefs, etc. (Freud, 2012). In this sense, studying the content of a speech consists of bringing out its manifest content: the themes most often discussed, the key words, the positions taken and the arguments invoked to justify them (Clauzard, 2014). In this context, according to Albig (1952), content analysis is “a research technique for the objective, systematic and quantitative description of the manifest content of communications, with the aim of interpreting them”. According

to Mucchielli, analyzing the content of a document or a communication, “is searching for the information found there, extracting the meaning or meanings of what is presented there, formulating, classifying everything contained in this document or communication.” (Mucchielli, 1979). For Mucchielli, in “content analysis, the essential thing is the meaning and not the form. Its division will in principle be different from that of classical linguistics.” (Mucchielli, 2006).

In this analysis step, the filters integrated into the Radarly® software allowed us to sort and categorize the data by, for example, revealing the most popular tweets, and therefore the topics, on Twitter using the Clusters functionality. The software’s functionalities also allowed us to determine the influencers and their networks, the scope of action of these Internet users and the tone of the messages they convey.

## **RESULTS**

Our study highlights the circulation of numerous conspiracy theories on Twitter during our period of analysis.

For example, in many tweets, the coronavirus would be - for a segment of the population - an invention which would serve as a diversion and allow the discreet installation of 5G equipment. For others, it is the waves emitted by these devices which would weaken the bodies of individuals and expose them to the coronavirus. The most extreme conspiracists even believe that Covid-19 is a direct consequence of this radio radiation deemed harmful and that it is transmitted only through them. However, we can note that Twitter is carrying out a massive cleanup of these publications in cyberspace, with increased attention to those that invite the sabotage of 5G antennas.

In another area, conspiracy theorists accuse, on Twitter, the Rothschilds of taking advantage of the epidemic for mercantile purposes. Others still assert that the virus does not exist but is intended for a universal vaccination campaign accompanied by electronic chipping.

We also find a video which is creating a buzz on the social network, in the form of a true-false television news and which explains that the virus responsible for Covid-19 is not natural, but was created by a laboratory financed by billionaire George Soros in order to annihilate the Chinese and Japanese populations. This video was posted online by the Swiss far-right conspiracy site Kla.tv and was, at the beginning of March 2020, among the most shared links in France on the social network. In this video, we find two fake medical experts, patents in biological engineering which have no relation to the subject, and a scientific study dating from 2007 that was deliberately misinterpreted.

With the health crisis, this practice, in conspiracy theories, has increased tenfold with the explosion of open platforms, such as BioRxiv, where numerous articles not validated by peers are posted, with studies that are much less solid and more subject to open to interpretation or doubt (Moatti, 2013). For example, at the end of January 2020, we found on BioRxiv, an Indian pre-study on “strangely similar insertions” between SARS-CoV-2 and HIV. This study was taken up worldwide by the complosphere in order to promote the thesis of a virus created in the laboratory. We find it in particular, in conspiracy theories on Twitter, during our period of analysis. It has since been dismissed by specialists and its own authors, but continues to be cited as a reference by supporters of the thesis of a laboratory virus.

In our study, we can also cite the circulation of numerous fake news. For example, we can report the often relayed fake news of a virus manufactured in a laboratory. Indeed, on Twitter, since the beginning of March 2020, a patent dating from 2004 relating to a vaccine against SARS-Cov-1 has been circulating in cyberspace and has been the subject of multiple misinterpretations.

This patent actually concerns a vaccine candidate against another type of coronavirus which has nothing to do with SARS-Cov-2. Not only are these gross errors of interpretation voluntarily or involuntarily relayed on the social network. But tweeters also do not hesitate to publicly attack the Pasteur Institute as having invented the virus at the origin of the pandemic.

As other fake news, we also found from February 2020, information claiming that a Cameroonian student in China was cured of the virus because of his African genes, while no evidence exists that Africans are more resistant to the virus.

We can also cite several viral tweets which claim that snorting cocaine could sterilize the nostrils of the coronavirus.

## **CONCLUSIONS AND DISCUSSIONS**

The explanatory descriptive analysis of the publications that we conducted on Twitter concerning Covid-19, using the Radarly® tool, during the period from 03/01/2020 to 06/29/2020 highlighted the resurgence of conspiracy theories, particularly with references to scientific studies.

We can note that reference to scientific studies is a classic rhetoric of conspiracy theories (Peltier, 2018). Indeed, they serve both to discredit speeches that are hostile to conspiracy theories and to criticize speeches from authority. The objective is to induce in the reader a real paradigmatic doubt through the very large number of references, often contradictory. According to Giry, this strategy already appeared in the 1960s, after the assassination of John Fitzgerald Kennedy, where conspiracy theories referred to quotes, academic works or footnotes in order to attribute the attack to the president to a conspiracy (Giry, 2017). Our analysis also corroborates other studies. For example, Kouzy's study that highlighted that 24.8% of the tweets collected during the pandemic were disinformation and 17.4% contained unverifiable information (Kouzy et al., 2020). We can also note that our work corroborates the results published by the IFOP polling institute, in its annual study on conspiracy for the Jean-Jaurès Foundation and the Conspiracy Watch (IFOP, 2020). In this survey carried out on a sample of 1,008 people representative of the French population aged 18 and over, from March 24 to 26, 2020, a majority of French people questioned (57%) believe that the coronavirus appeared naturally, but more than one in four respondents (26%) think it was made intentionally (17%) or accidentally (9%) in a laboratory.

In conclusion, our work highlights that medical misinformation about the epidemic was spread at an alarming rate on Twitter and was having health, social and societal impacts.

In discussion, it seems to us that with the advent of Web 2.0 and Twitter, the border which separates the public space that of the Internet, and our private space, our intimate life, has become increasingly blurred. Our data, our testimonies, our tweets are preserved, relayed, disseminated, transformed. Thus, during the Covid-19 epidemic, with the advent of this social web, conspiracy theories and fake news found a unique “breeding ground” for propagation. The boundaries of digital have become more and more subtle because manipulations have become more and more effective and have become invisible across these boundaries and in this cyberspace, where our privacy no longer belongs to us. In our opinion, it is a true social paradigm, beyond being a technological revolution. It would be interesting to deep our results by carrying out quantitative analyses, both around conspiracy theories and fake news that circulated during our study period, but also controversies. It would also be interesting to determine the geolocation of the dissemination of these messages. It also seems interesting to continue our work by analyzing the social impacts of this conspiracy theories and fake news.

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