



(Un)Masked antisemitic conspiracy theories

Analysing the presence of far-right narratives in Italian anti-vax
echo-chambers on Twitter during the Covid-19 Pandemic

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Abstract

Conspiracy theories about the Covid-19 pandemic have emerged as soon as the global health emergency started. They have found fertile ground on social media networks as they facilitated their proliferation enabled by their filtering, echo-chambers and polarisation mechanisms. Although social media's role as amplifier of emotionally charged conspiracy theories is undeniable, there are several, complementing factors, that have led people to spread them. Notably, the socio-technological aspect of our modern *post-truth era*, the structure of the *web 2.0* and the consequent cybercascades of mis/disinformation feature among the most relevant drivers into the dissemination of conspiracy theories online. The resulting uncertainty and mass anxiety caused by the Covid-19 pandemic, aggravated by these factors, have been exploited by extremist organisations to normalise hatred towards what is considered to be the *antagonistic Other*. This has been particularly evinced by far-right organisations, which have historically targeted Jews and have adapted their core antisemitic narratives to Covid-19 conspiracy theories. Crucially, the *New World Order* and the *Great Reset* have been particularly successful conspiracy theories to spread antisemitic narratives, though in the concealed form of anti-establishment and denialist framings of the Covid-19 pandemic. In particular, the use of antisemitic dog-whistles such as *Élites* and *Globalists* have been associated with old anti-Jew narratives in what constitutes a new form of online antisemitism: *veiled antisemitism*. This study aims at unveiling such antisemitic narratives in one of the Italian antivaxxer community's framing of the Covid-19 pandemic: the *health dictatorship*. To do so, it undertakes a Social Network Analysis and a Content Analysis. Through the first method, it will investigate the networked structure of the Italian hashtag for *health dictatorship*: #DittaturaSanitaria. The identification of a central conspiracy theorist resulting from the network analysis will inform the content analysis of a sample of Tweets posted by the selected central player. In conclusion, the social network analysis research found that: 1) social roles within networks inform the type of content spread to normalise antisemitic

narratives; 2) graph visualisation can effectively analyse patterns of information dissemination; 3) far-right politicians are associated with antisemitic conspiracy theories; 4) Covid-19 conspiracy theories offer a remarkable monological belief system in which new world events are incorporated in established antisemitic *chain of equivalence*. Complementary results were achieved through the Content Analysis: 1) the identification of an *antagonistic Other* entailed the emotional leveraging of feelings of hostility, fear, and victimhood; 2) most common veiled antisemitic narratives are Élités are profiting from Covid-19, are the source of Covid-19 and the Holocaust trivialisation of comparing antivaxxers' perceived persecution to the one of Jews under Nazi Germany; 3) veiled antisemitism constitutes a remarkable epistemological hinge for Covid19-unrelated conspiracy theories. Finally, it promotes this theoretical and analytical approach to understand online conspiracy theories generally and antisemitic ones and invites future research to take into account the networked structure of conspiracy theories on social media.

Introduction

Conspiracy theories (CTs) about the Covid-19 pandemic emerged as soon as the global crisis started. Their appeal stands in their function of delivering easy answers to complex problems, as they attribute the causes of noteworthy events to the “malevolent acts of secret and powerful groups” (Douglas, 2021, p. 1). Although CTs have historically been prevalent in societies, their spread online is unique and more so in the context of the Covid-19 pandemic, as the global restriction of movement to stop the spread of the virus has resulted in a potential increase of exposure to false information (Douglas, 2021). Indeed, online mis/disinformation has considerably multiplied in the past years and so have preoccupations raised over the role of social media as amplifiers of falsehoods, including CTs (Stano, 2021). The most vivid representation of this phenomenon is the antivaxxer movement, which on top of manifesting preoccupations and hesitancy over a vaccination programme, has also become a general term for the profile of an individual believing in conspiracy theories associated with Covid-19.

Moreover, the antivaxxer movement has been recognised as a perfect vessel for far-right extreme ideologies (Crawford, 2020). As CTs allude to secret powerful groups running and deciding world events, their existence mainly relies on the identification of an enemy. This has proven to be a golden opportunity for extremist organisations to exploit the general panic over the pandemic and spread their hate messages towards established out-groups (Kruglanski *et al.*, 2020). In the case of Western societies for instance, the far-right has capitalised the opportunity by targeting “Jews, foreigners, the government and more generally anyone outside the White supremacist milieu” (Kruglanski *et al.*, 2020, p. 126). However, content moderation on mainstream social media platforms impedes the circulation of explicit hate speech making the analysis of far-right ideologies online more complex. Therefore, generic references to the so-called Elites have found traction on far-right social media circles, as indicated by a report of the Institute for Strategic Dialogue (2020) and the

related stark increase of conversations about Bill Gates, George Soros, the Rothschilds and Jeff Bezos. The constant references of Jewish individuals within Covid-19 CTs, and their association with the words Elites, have come to represent the antisemitic dog-whistles for the far-right's exploitation of the antivaxxer movement in the form of *veiled antisemitism* (O'Donnell, 2021).

Although the sole presence of antisemitic dog-whistles does not necessarily translate into belief and/or support of the far-right cause, they nonetheless cause harm to the Jewish community in the same way, if not worse, as social media users do not control where and how veiled antisemitism spreads (Rose, 2021). Moreover, Marcus (2015) highlights how antisemitic prejudice is a highly adaptable conspiratorial framework that has "repeatedly generated new figures while recycling old ones in new forms" (p. 1). It follows that the relevance of unveiling the dangerous antisemitic narratives behind Covid-19 CTs is of extreme importance as the Covid-19 pandemic has offered an historical moment for the revival and normalisation of antisemitism (Rose, 2021). Additionally, empirical evidence (Miller, 2020) has found that Covid-19 CTs have been able to form a *monological belief system*, defined by Wood, Douglas and Sutton (2012) as a worldview in which different beliefs can be linked in a "mutually supportive network" (p. 767). Since antisemitism has proven to be the underlying structure of Covid-19 CTs, the future of conspiratorial beliefs risks being irreversibly permeated by antisemitic narratives, as for instance has been the case with the employment of antisemitic framing of the Covid-19 pandemic in the conspiratorial community of Italian supporters of the Russian invasion of Ukraine (Di Noto and Puente, 2022; Orłowski, 2022). This is extremely relevant in the Italian context, which has experienced a stark increase of antisemitic episodes with the advent of the Covid-19 pandemic (Guetta, Gatti and Cambuzzi, 2022) and more so online, as antisemitic slurs on social media platforms were second only to misogynistic ones (VOX Diritti *et al.*, 2022).

So far, scholarly and non-scholarly efforts in discovering the phenomenon of veiled antisemitism in Covid-19 CTs have lacked. However,

complementary work has been done on what drives people to believe in CTs generally (Walter and Drochon, 2020; Douglas, 2021; Fitzgerald, 2022) and during the Covid-19 pandemic specifically (Pereira, Silveira and Pereira, 2020; Douglas, 2021; van Mulukom *et al.*, 2022), how they spread and are amplified on social media networks (Marchal and Au, 2020; Leal, 2021a; Stano, 2021), and their association to political movements (Institute for Strategic Dialogue, 2020; McNeil-Willson, 2020). Few have thoroughly investigated the implied antisemitic narratives in Covid-19 CTs (Amadeu Antonio Foundation, Expo Foundation and HOPE not hate, 2021; Karakoulaki and Dessì, 2021; Rose, 2021), though they all miss specific focus on the networked structure and the mechanisms through which they are spread, and more generally lack of relation to the theoretical efforts done in the field of the psychology of CTs. This is also the case for the Italian context, in which exhaustive efforts have been done to both quantitatively (VOX Diritti *et al.*, 2022) and qualitatively (Guetta, Gatti and Cambuzzi, 2022) assess antisemitism online, although lacking focus on veiled antisemitism and theoretical relevance in the field of CTs.

Consequently, this study aims at discovering the presence, structure and mechanisms of veiled antisemitism in the case study of the antivaxer movement in Italy. First, it will provide the working definitions and terminology of the field of CTs. Next, it will provide an *excursus* of the socio-technological context in which CTs flourish, namely the web 2.0, post-truth era and the use of mis/disinformation as tools allowing the spread and reach of CTs. Following, it will review the literature on the psychological drivers leading individuals to believe in CTs. Attention will be given to psychological needs that CTs appease, following the classification provided by Douglas, Sutton and Cichocka (2017) of epistemic, social and existential needs. Subsequently, it will explore the current debate on the role social media have in the amplification of CTs, with particular focus on filtering, echo-chambers and polarisation mechanisms they enact. Then, it will look at the academic works linking conspiratorial thinking to partisanship, focusing on the association of particular characteristic of

conservatism as relating to conspiratorial thinking. The overview of the drivers leading individuals to conspiratorial thinking will then allow the review of the literature on the specific context of CTs in the Covid-19 pandemic and their application in the antivaxxer movement. Lastly, it will look at the exploitation of Covid-19 CTs by extremist movements, with particular attention to the far-right, and their weaponization for the spread of antisemitism.

Next, the methodology and the research design of the analysis will be outlined. In particular, it will introduce in detail the two methods selected for this case study together with their advantages and limitations: social network analysis (SNA) and inductive latent pattern conventional content analysis. In these sections, ethical limitations will be assessed together with mitigation efforts undertaken by the author.

The literature review will serve as a theoretical framework for the analytical part of this study, which aims to uncover antisemitism in the Italian antivaxxer Twitter community. It will do so through the application of two methods: social network analysis (SNA) and an inductive latent pattern conventional content analysis. The first method will allow the analysis of the networked structure of a prominent antisemitic conspiratorial framing of the Covid-19 pandemic, namely the *health dictatorship* one. This will allow the investigation of what are the main components that lead to the use of such framing, hence of veiled antisemitism, through a community-level approach designed to evaluate clusters' information dissemination patterns and the identification of key players driving the conversations in the selected network.

This step will be followed by the selection of a key player in driving the conversation Covid-19 CTs in order to assess the presence and the different facets of veiled antisemitism in a sample of tweets of said selected actor. It will do so by *unveiling* the antisemitic narratives behind the actor's different framings of the pandemic. Finally, the results of both analytical processes will inform the discussion section of this study, in which findings will be linked back to the theoretical background outlined in the literature review. Finally, the

discussion of the results will allow to answer to the research question: how does veiled antisemitism spread in the Italian antivaxxer community and what are the antisemitic conspiratorial narratives behind it? Conclusively, it will relate the main findings to the literature on the psychological, political, technological factors driving people to believe in CTs in order to situate this study in the broader academic debate.

Literature Review

CTs help make sense of the world, of the many unpredictable turns it takes and has a role of appeasing the anxiety of the unknown (Douglas, Sutton and Cichocka, 2017). In the context of the Covid-19 pandemic, conspiracy theories have understandably found their way to permeate cultures, social networks, and individuals, followed by a strong politicisation of support or opposition to health-measure designed to curb the spread of the virus. It has seen the mainstreamisation of old and new conspiracy theories (CTs) targeting the ‘elite’, ‘globalists’ and health institutions, which rely on a strong underlaying of antisemitism (ISD and B’nai B’rith International, 2022). Therefore, this literature review will first present working definitions of conspiracy theories and the concepts around it. It will be followed by an overview of the means and context through which CTs are able to permeate social media networks online. It will then explain what the drivers of conspiracy thinking are, focusing on three main aspects: psychological, technological, and political. Following, it will connect the literature of the previous sections to the specific context of CTs during the Covid-19 pandemic, with a specific focus on the antivaxxer movement and its relation to far-right ideologies. Consequently, the following section will centre on the antisemitic underlaying and underlying structure of antivaxxers’ conspiracy beliefs and theories. Finally, it will situate this study in relation to gaps found in the literature, proposing an alternative approach to study conspiracy theories online.

Conspiracy Theories

First, a definition of conspiracy theory is due. The Institute for Strategic Dialogue and B’nai B’rith International (2022) define a conspiracy theory as follows: “A conspiracy theory is a belief that events are being secretly manipulated by powerful forces with negative intent. Typically, conspiracy theories involve an imagined group of conspirators colluding to implement an alleged, secret plot” (p. 7). The sole existence of a conspiracy theory does not

necessarily mean that an individual that stumbles upon one automatically believes in it, act on it or spread it. Academic works suggest that while the term conspiracy theory indicates that a certain storytelling of an event could be either false or true, conspiracy beliefs are those individual theories that are believed to be true. Moreover, the predisposition to believe in them is usually referred as conspiracy thinking or conspiracy mentality (Walter and Drochon, 2020, p. 2). Klofstad *et al.* (2019) define it as follows: “an underlying worldview that to one degree or another disposes individuals to reject official accounts and accuse powerful actors of collusion” (p. 2). Said degree is often cited as a *continuum*, as the higher an individual is on this scale, the more likely is the acceptance of a conspiracy theory (Klofstad *et al.*, 2019). Additionally, studies suggest that belief in one conspiracy theory predicts belief in other ones, sometimes even contradictory between each other. Wood *et al.* (2012) defines this phenomenon as “monological belief system”, which is a “unitary, closed-off worldview in which beliefs come together in a mutually supportive network” (p. 767). For example, the authors provide an example of individuals believing that Bin Laden is still alive while also believing that he was already dead when U.S. military raided his hideout. Accordingly, Miller (2020) shows how analysing singular CTs alone and trying to debunk them is not recommendable, as what matters most are the higher-order beliefs: “conspiratorial thinking, denialism, and distrust of government” (p. 320). Furthermore, Fitzgerald (2022) shows how monological belief system is vital in the ontological identity formation of conspiratorial communities in what the author calls a “chain of equivalence”: there is no need for each CT to be consistent with one another, but to provide a “sequential narrative” aimed at erasing and/or an out-group (p. 6).

The Web 2.0, Mis/Disinformation and Post-Truth Era

The dissemination of CTs nowadays is mainly facilitated on social media networks. Gualda and Rúas (2019) defines the dissemination of CTs online as a consequence of certain groups manipulating individuals into spreading

mis/disinformation. To exhaustively assess the phenomenon of CTs, and their dissemination online, it is essential to lay out the context in which they spread – the web 2.0 –, how they are operationalised – mis/disinformation – and in what socio-political context – post-truth era.

The advent of *new media* has dramatically impacted the spread and propagation of CTs (Scrivens and Conway, 2019). In particular, the emergence of the web 2.0 marks a revolution in information and communications systems, as it has allowed users to generate content, thus allowing a participatory culture to take place in virtual communities (Grinberg *et al.*, 2019; Min, 2021; Stano, 2021). The rise of connectivity and Internet access have increased the number of people on social media, as 9 out of 10 internet users own an account (DataReportal, 2022). While this led to many benefits such as the democratisation of information, it has also resulted in a more rapid spread of mis/disinformation, be it deliberate or accidental (Stano, 2021). This has allowed CTs to prosper, as content shared by online users does not have to be verified or confirmed before publication (Stano, 2021).

The European External Action Service (EEAS) (2020) defines misinformation as information that “refers to untrue information that individuals spread without any intent to mislead, though the effects of such misinformation can still be harmful”; while disinformation is “verifiably false content that is created, presented and disseminated for economic gain or to *intentionally* deceive the public, and may cause public harm”. When talking about mis/disinformation, the debate often centres on the virality and contagion of inaccurate information, along with empirical research showing how misleading content travels faster than fact-checked ones (Bruns, Harrington and Hurcombe, 2020; Pulido Rodríguez *et al.*, 2020). The mechanisms of such contagion are memes, which were first defined by Dawkins (1976) as “unit of cultural transmission, or a unit of imitation” (p. 192), which supposedly permeate cultures and *infect* social discourses. However, the concept of contagion does not account for the agency and active role users have when confronted to CTs as for instance argued by

(Jenkins, Ford and Green (2013) which dispute the notion that memes alone have operational capacity and redirect our attention to the porosity of culture as opposed to the passivity of users.

Such porosity of culture is indicative of the sociological transition from first to second modernity. Fitzgerald (2022) argues that whereas the first was characterised by “constancy, scientific truth, and incremental progress”, the second one is defined by “flux and instability” (p. 5), which has resulted in spikes of anxiety coupled with a distinctive need for political/emotional security, something peculiar of our modern ‘identity politics’ (Steele and Homolar, 2019; Kinnvall and Mitzen, 2020). The emotional need, expressed on social media by “appeals to emotion and personal belief” granted by the advent of the web 2.0, creates the necessary condition for the spread of falsehoods which then become more influential than scientific and objective facts (Stano 2021, p. 493). Some scholars however have rejected the notion that social media amplify emotional posts as only small fractions of people are exposed to them (Grinberg *et al.*, 2019) and only those with specific individual characteristics (Guess, Nagler and Tucker, 2019; Guess *et al.*, 2021). This does not necessarily mean that technological factors should not be considered altogether in the study of CTs; crucially, it indicates the need of coupling the two aspects holistically, as individual characteristics can be manipulated and aggravated by malicious actors.

Although it might be easy to point the finger at social media platforms, CTs are better understood as a symptom of the post-truth era, and not as a sole consequence of the advent of web 2.0 and the existence of social media platforms. Indeed, the literature on CTs is firmly grounded in what can be the psychological, political and technological conditions leading individuals and societies at large too develop conspiracy thinking and adhere to CTs.

Drivers leading to conspiracy thinking

The next sections will include the literature on three main categories of drivers which are correlated to conspiracy thinking: psychological needs, social media mechanisms, and political partisanship.

Psychological needs

The largest body of literature on CTs focuses on the psychological factors and individual characteristics that drive people to believe in CTs, and what consequences CTs have. In a systematic review of psychological literature on what drives people to believe in CTs, Douglas, Sutton and Cichocka (2017) reports that people are attracted to CTs when psychological needs are not satisfied. According to the authors these are:

- epistemic needs – as for instance is the case with people looking out for patterns and meaning to explain difficult situations;
- social needs – as for instance sense of belonging or feeling that one's group is under threat;
- existential needs – as is the case with a desire to re-establish sense of control and security.

Epistemic Needs

The quality of information out there plays a pivotal role into capitalising conspiracy thinking. Shahsavari *et al.* (2020) highlight how conspiracy theories are more prevalent when “access to trustworthy information is low, when trust in accessible information and its sources is low, when high-quality information is hard to come by, or a combination of these factors” (p. 282). In the context of the Covid-19 pandemic, it resulted in an *infodemic*, defined as the “overabundance of information about the ongoing pandemic, which yielded severe repercussions on public health and safety” (Pierri *et al.*, 2021, p. 1).

Moreover, modern times are characterised by an age of suspicion (van Zoonen, 2012). In this regard, van Zoonen (2012) lays out a scenario in which knowledge

disseminated by official institutions and experts has come to be suspected, and eventually replaced by personal beliefs and opinions. Suspicion has led people to distrust information coming from institutions. In this regard, Stano (Stano, 2021) argues that social trust among online users, in the era of social media and higher interconnectedness, has become the base of CTs and has the power to transcend scientific proven information. This can be also tied to the concept of monological belief system, in which epistemological consistency is replaced by beliefs and narratives mutually reinforcing each other, held up together by a chain of equivalence.

Existential Needs

As presented before, information abundance creates confusion and uncertainty, which according to Stano (2021) can lead individuals to reinforce belief systems in order to cope with the anxiety resulting from it. Anxiety is central to the academic debate on CTs, something Fitzgerald (2022) has presented as a productive force to the achievement of ontological security of the self. The author identifies ontological security as the need of individuals to eliminate anxiety, something typical of our second modernity, which can increase individuals' and communities' conspiratorial thinking (Fitzgerald 2022).

On this matter, Kruglanski, Molinario and Lemay (2021) argue that belief in CTs can be motivated by a perceived threat of security and control while Grzesiak-Feldman (2013) highlights the role of anxiety and worry as drivers. It follows that the appeal of CTs is not to be found in the content of CTs, but in the appeasing role they have, as they provide “broad, internally consistent explanations that allow people to preserve beliefs in the face of uncertainty and contradiction” (Douglas, Sutton and Cichocka, 2017, p. 539).

Moreover, Grzesiak-Feldman (2007, 2013), found that anxiety is linked with acceptance of conspiracy stereotypes about Jews as well as with more general conspiracy thinking. Anxious individuals and groups therefore tend to feel a higher level of inter-group threat, which is incidental with the antagonization

and derogation of an out-group in order to defend the in-group (Biddlestone *et al.*, 2021).

Social Needs

The desire to belong to a group, and the drive to keep a positive image of the self, are part of what Douglas, Sutton and Cichocka (2017) refer to as social motivations to believe in CTs. The preservation of the self and group identity comes at the expense of attributing blame of undesirable outcomes to an out-group or, as briefly mentioned before, an antagonistic Other. Laclau and Mouffe (2001) denote antagonism as the “presence of the Other that prevents from being totally myself” (p. 125). The ‘Us versus Them’ structure present in the very definition of conspiracy theory is then linked to the quest to preserve one’s self or group’s identity from a perceived threat. Indeed conspiracy thinking has been associated to intolerance against powerful groups (Imhoff and Bruder, 2014) and who is perceived to be the enemy (And and Sedek, 2005).

Moreover, conspiracy theories are also employed as a way to defend the self or the group’s image in face of a perceived disadvantaged position (Douglas, Sutton and Cichocka, 2017). Lastly, a magnified view of oneself or of the group, or better narcissism, is also found to be linked to conspiracy thinking (Cichocka *et al.*, 2016).

Social Media

Epistemic, existential, and social needs that drive people to adhere to CTs, can be satisfied on social media platforms.

For instance, social needs, intended as the desire to belong to a group, can be facilitated by the formation of echo-chambers which predisposes users to “information from like-minded individuals” (Stano 2021, p. 487). Pereira, Silveira and Pereira (2020) provide an alternative definition which better encompasses the networked aspect of it, describing digital echo chambers as “psychosocial bubbles” (p. 3) that hamper the diversity of a social network which are fed by specific filtering technologies apt to amplify engagement, often

called filter bubbles (Pariser, 2012). Moreover, the formation of echo-chambers on social media can lead users to polarise when faced with outgroups (Shmargad and Klar, 2019; Min, 2021). It follows that this scenario is prime for the homophily of networked communities, both offline and online, as shown by Quattrociocchi and Vicini (2016) which showed how users in echo-chambers are more likely to focus on specific topics and isolate from different ones and alternative views. Thus, the technological features of social media described here do allow for in-group building and out-group antagonism by allowing like-minded individuals to come together and reinforce groups' belief systems.

This is also due to the emotional content of CTs, as they are amongst the most attention-grabbing content online (Marchal and Au, 2020; Mutanga and Abayomi, 2022). Conspiracy content that spread fear, anxiety and antagonism relating to a perceived threat might then increase the existential need to achieve ontological security thus pushing people to engage with more attention-grabbing content.

Lastly, relying on social media as a source of information predicts conspiratorial thinking (Sallam *et al.*, 2020; De Coninck *et al.*, 2021). Together, information overload, echo-chambers and filter bubbles create a tunnel vision for which users might share information they just assume to be true, without 'neutral' verification, something that Sunstein (2017) has dubbed *cybercascades*, which is vital for misinformation to spread and survive on social media. Therefore, the epistemic need to look for patterns is heavily influenced by what content is recommended and cascaded to single users.

Conspiracy and Conservatism

Although the contribution of psychological literature is pivotal in the understanding of the phenomenon on an individual level, political perspectives help make sense of which groups are more vulnerable to conspiracy theories.

This is particularly salient when looking at literature which looks at the link between partisan ideologies and conspiracy beliefs. For example, Walter and

Drochon (2020) suggest that people who believe in CTs tend to gravitate on the right of the political spectrum. Accordingly, Betz (2021) claims that “conspiracy thinking is a breeding ground for radical right wing populist sentiments”, a finding which echoes with empirical research made by Kennedy (2019) which found that countries with higher populist turnout at elections presented more individuals who believed that vaccinations were useless and ineffective.

Historically, conservative CTs have had more success than liberal ones, and right-wing ideologies are positively associated with a stronger in-group echo chamber which can lead to an increase in conspiracy thinking (Min, 2021). Adding to this, conservatives are more likely to belong to homogenous groups than liberals in social media (Carney *et al.*, 2008). Moreover, science denialism (Miller, Saunders and Farhart, 2016) and existential and relational needs (Jost and Krochik, 2014; Stern *et al.*, 2014) are often emphasized in conservatism.

Crucially, these features become critical when political discussion happen on social media, a medium in which political bias and fringe political ideologies find fertile ground with amplification and recommending algorithms. In this regard, Twitter recently published its own study where they found that the content of the political right receives higher amplification than the political left (Huszár *et al.*, 2022). Therefore, biased political amplification algorithms coupled with right-wing conspiratorial thinking might create an explosive mix in which vulnerable users may be drawn to extremist ideologies pertaining to the extreme right without even being aware of the targeted content they are consuming. As a matter of fact, social media networks’ content recommendation technologies which aim to keep users engaged might in turn further “gravitation towards political extremes” (Watkin, Gerrand and Conway, 2022, *no page*¹). This sets the right premises for widening social polarisation, defined as “divergence of political attitudes to ideological extremes” (Watkin, Gerrand, Conway 2022, *no page*), which typically enhance self-victimisation and antagonization of out-groups, promoting dangerous *us vs them* dichotomies

¹ To date, this article has only been published in a HTML format thus the absence of a page.

which can result in violent extremism (Ibid.). This is particularly true in the current Covid-19 pandemic, in which uncertainty and anxiety can only aggravate matters.

CTs in the Covid-19 Pandemic

In the context of the Covid-19 pandemic, the abundance of information on social media, and the relative complexity of a world event that has caught most countries unprepared, has characterised a time of uncertainty in which the quest for explanations have proven to be a fertile ground for the emergence and spread of CTs. CTs about the Covid-19 began to emerge as soon as the emergency started and, at the time of writing, are still prevalent on social media (van Mulukom *et al.*, 2022). Conspiracy beliefs about the pandemic have been proved to negatively influence the observance of health measures (Allington *et al.*, 2021). Not only that, Covid-19 related CTs have been consequential in fomenting prejudice (Roberto, Johnson and Rauhaus, 2020) and contributed to vaccine hesitancy (VH) (Bertin, Nera and Delouvé, 2020).

As Covid-19 has been primarily a health crisis, science denialism has become an “effective epistemological hinge” (Fitzgerald, 2022; van Zoonen, 2012) for conspiratorial thinking, as predisposition to reject authoritative information has been proved to be an explanatory factor and predictor of belief in Covid-19 CTs (Uscinski *et al.*, 2020).

Belief in Covid-19 CTs and distrust in science have been linked to lower scientific reasoning (Čavojská, Šrol and Ballová Mikušková, 2022), populist attitudes (Eberl, Huber and Greussing, 2021), and denialism (Uscinski *et al.*, 2020). Examples of Covid-19 CTs include: Covid-19 was created by the Chinese, it was a hoax designed by left-wingers to stand in the way of a Trump re-election (Douglas, 2021), that protective masks are dangerous (Weill, 2020) or that 5G towers were spreaders of Covid-19 (Loadenthal, 2021).

Insecurity proved to be pivotal in the emergence of conspiracies around the origin of Covid-19, vaccination campaigns and social restrictions (Bogel-

Burroughs, 2020). The pandemic has threatened the fulfilment of what were previously defined to be psychological needs of individuals in uncertain times: epistemic, social, and existential needs (Douglas, 2021). This is a result of an increase of social anxiety which played on already existing social tensions (Kruglanski *et al.*, 2020). Indeed, as noted before, research suggests that conspiracy theories thrive during times of crisis, as individuals seek a way to cope with unpleasant and unpredictable situations (van Prooijen, Douglas and De Inocencio, 2018).

Uscinski *et al.* (2020) empirically confirmed what were identified before as higher-order beliefs of conspiracy thinking also in the case of the Covid-19 pandemic, as they find that the strongest explanations for COVID-19 conspiracy beliefs are denialism, conspiracy thinking, and partisan motivations.

[Antivaxxers: between hesitancy and conspiracy thinking](#)

In 2019, the World Health Organisation has classified vaccine hesitancy as one of the ten dangers to world health, and it is described as a “delay in acceptance or refusal of vaccines despite the availability of vaccine services” (cited in Lovari, Martino and Righetti, 2021, p. 352). Vaccine hesitancy has followed the creation of communities which have resisted to mandatory vaccination campaigns, advocating for personal freedom and choice (Francia, Gallinucci and Golfarelli, 2019). Additionally, both sides of the political spectrum have politicized the vaccine debate, albeit radical right and populist parties have made this trend more apparent. (Sharma, Zhang and Liu, 2021). Vaccine sceptics have historically been associated to conspiratorial thinking, especially with regards to antisemitic CTs (Weinberg, 2021). Expectedly, antivaxxers movements have gained momentum during the Covid-19 pandemic and has allowed to form what the Community Security Trust (2022) calls a Covid conspiracy movement. Although, as rightly pointed by Gobo and Sena (2019), the dichotomy of pro-vax and no-vax is a “media artefact” (p.188) far from being a phenomenological description of the entirety of the movement, this study finds that the common

term antivaxxer satisfies the scope of this study, which is to identify conspiratorial communities on Twitter through the analysis of anti-scientific CTs that are correlated to what is broadly referred to as the antivaxxer community.

Lastly, the battleground of ideas regarding vaccination is on social media networks, where contrasting views are subject to an echo-chamber effect which fuels polarisation of the debate (Schmidt et al. 2018). Not only that, but these online networks serve as a suitable place for collective action, in which groups can organise protest, reinforce their own ideas and seek political opportunities (Federici and Braccini, 2020). When it comes to anti-vax groups, protests have also shown to be of extremist nature, with many groups in the EU and in the U.S. partnering with far-right movements, which in some cases involved planning of violent actions through the use of firearms and explosives (Townsend, 2022). Vaccine hesitancy, together with the spread of its CTs and the high politicisation of health-related scientific debate, is not then just a health matter, but has become a case of violent extremism.

Berger (2018) defines the key tenet of extremism to be the following: “an in-group’s success or survival can never be separated from the need for hostile action against an out-group” (p. 44). As seen before, the need of antagonization of an out-group, the need to look for patterns to reduce uncertainty and anxiety, and a strong drive for in-group building are predictors of conspiracy thinking, antivaxxers making no exception as we will explore in the next section.

Same old Same old: Antisemitism in Covid-19 CTs

At first glance, anti-vax groups are hard to situate ideologically, although they do share a common distrust of the establishment responsible for the implementation of Covid-19 countermeasures (Newhagen and Bucy, 2020). This is a common trait of all conspiracy theories as per the definition provided before, the alleged *powerful forces* behind secret plots are believed to be and/or in cahoots with governments. Said forces have often been referred as globalists

and/or elite, which are considered by O'Donnel (2021) and McNeil-Wilson (2020) as coded words to refer to Jews. This is peculiar of many already existing conspiracy theories which nowadays also make part of the chain of equivalence of Covid-19 CTs. As shown by Media Diversity Institute (Karakoulaki and Dessì, 2021), this resurgence of a lattice of established CTs includes the New World Order (NWO) and the Great Reset (GR), both associated with far-right online communities.

As seen before, there is correlation between right-wing ideology and conspiratorial thinking, especially in terms of their need to eradicate existential threats by liberating their communities from outside attacks. A further association of both movements can be seen in a study carried by the Institute for Strategic Dialogue (2020), which shows how there's has been a substantial increase since the start of the pandemic of discussions on social media about Elites within far-right circles (i.e. Bill Gates, George Soros, the Rothschilds, Jeff Bezos), renown Jewish figures which have centred many CTs even before to the start of the Pandemic. Lastly, the resurgence of themes of the *Protocols of the Elders of Zion*, one of the most notorious antisemitic publication of modern times and inspiration for Hitler, and their rebranding in the NWO and GR CTs, mark the link between Covid-19 CTs and far-right even more (Amadeu Antonio Foundation, Expo Foundation and HOPE not hate, 2021; United States Holocaust Memorial Museum, 2022).

Although the Jewish community is not a new target of far-right disinformation, especially when it comes to CTs in general (Amadeu Antonio Foundation, Expo Foundation and HOPE not hate, 2021) and CTs around vaccination specifically (Weill, 2020; Weinberg, 2021), Covid-19 has proved to be a fertile ground for the far-right to push and normalise antisemitism. Indeed, Jews feature among the primary hate-targets of the far-right in relation to Covid-19: "Jews, foreigners, the government and more generally anyone outside the White supremacist milieu" (Kruglanski *et al.*, 2020). As part of their attempt to exploit the Covid-19 pandemic and propagate its extremist ideology, CTs are

weaponised by the far-right to push people to extremist ideologies such as Antisemitism and Islamophobia and can be considered as a form of attack (Weill, 2020; Grossman, 2021). This is achieved through the exploitation of digital filter bubbles and echo-chambers online, which function to normalise extremist ideologies and lower hesitancy towards violent action. In this regard, Crawford (2020) argues that the far-right is exploiting psychological vulnerabilities and anxiety to “normalise its views and make those of the political mainstream seem inadequate when it comes to explaining or resolving the crisis”.

Conclusion

In conclusion, the literature review has helped laying out the context in which conspiracy claims exist, namely the means through which they spread (web 2.0 and mis/disinformation) and the sociological context in which they operate (post-truth era). The academic debate and empirical efforts have generally focused on why people believe in conspiracy theories, with diverging but complementary results which mainly centre on social media platforms’ filtering, recommendation and echo-chamber mechanisms and political-psychological variables. Although the debate has moved away from reductionist and absolutist stances on such topics, the availability of big data analytics provide the opportunity to move away from *why* CTs are believed to *how* they exist and are kept alive. In this regard, Min (2021) highlights the importance of communications variables. Social media networks diversity and analysis will be at the core of this study, as its importance is pivotal in conspiracy theory acceptance. Min’s words succinctly explain the relevance of such approach: “How people are connected to others, how they are embedded in larger networks and communities and how they talk there are equally important” (p. 423). Moreover, there is a lack of academic literature focusing on latent meaning of CTs, favouring the study of single CTs but not focusing on higher-order beliefs that drive conspiracy thinking, and ultimately making the connection to

antisemitism. Although non-scholarly efforts have been made in this direction (Moonshot, 2019; ADL, 2020; Amadeu Antonio Foundation, Expo Foundation and HOPE not hate, 2021; European Commission. Directorate General for Justice and Consumers and Institute for Strategic Dialogue., 2021; Weinberg, 2021; ISD and B'nai B'rith International, 2022), they fail to address the networked aspect of antisemitism in CTs, more so in the Covid-19 pandemic. On this perspective, Hugo Leal (2021) summarises succinctly the core of this study: “the Internet, as a whole, is more than just a platform on which conspiracy theories can be studied since its networked structures fundamentally shape their form, dissemination and evolution” (p. 497).

Methodology

This study aims to analyse the phenomenon of veiled antisemitism in the Italian antivaxxer Twitter community, expressed often with coded words and dog-whistles of antisemitic narratives. It sets out to do so through two methods: a social network analysis and a content analysis. On the one hand, the first method will help to quantitatively assess the structure of a sampled network to identify patterns of information diffusion, social roles of single users and key players through a set of established mathematical metrics. The identification of a central account will allow a content analysis on their tweets to describe their framing of the Covid-19 pandemic. The underlying meaning will be then extracted and categorised based on their adherence to established antisemitic conspiracy theories and narratives. Finally, this approach will answer the research question: how does veiled antisemitism spread in the Italian antivaxxer community and what are the antisemitic conspiratorial narratives behind it?

The choice of employing a mixed method approach stems from the complexity of the issue at hand. Specifically, the study of conspiracy theories online has greatly benefitted from the advent of big data and software able to process data proportionally to the growth in size of conspiratorial content online. However, automated tools are limited in detecting the linguistic nuances provided by a critical reflexive approach. Hence, quantitative analysis can be connected to qualitative analysis, for instance to allow the detection of key actors in a social media network with the narratives they produce (Butter and Knight, 2021). SNA allows an accurate depiction of how polarised communities are structured and who contributes the most to the conversation around a specific topic. The identification of central actors that “generate behaviours associated with the dissemination of conspiratorial content” in various communities allows a deeper understanding of extremism (Butter and Knight, 2021, p. 691). Moreover, emotional language to achieve greater reach at the demise of objectivity, a staple characteristic of the post-truth era, requires an attentive qualitative analysis that

can be overlooked by conventional quantitative measurement such as word frequency.

Therefore, the analysis will follow two main methods, the first one being quantitative and the second qualitative. The first method is Social Network Analysis (SNA). SNA is defined as a “set of tools and methods that enable to analyse structures called social networks”, whereas a social network is a “a set of nodes and connections between nodes” (Musial, 2018, p. 2232). The resulting network is then displayed visually and presented in ways that allows the analysis of relevant patterns of communication. One key advantage of SNA is the processing of vast amount of relational data and the consequent analysis of the overall network structure (Yao *et al.*, 2021). Moreover, network metrics (see table 1 and 2) allows for the analysis of information diffusion and the detection of social roles within a community. The metrics analysed to detect influential players for this SNA are Degree Centrality – measurement of influence -, Eigenvector Centrality – level of popularity -, and Betweenness Centrality – level of connectivity of a node and Page Rank – “which denotes the extent of authority and trust (Alhajj and Rokne, 2018; Klofstad *et al.*, 2019). Identifying influential players in a conspiratorial community allows the identification of the “speed and the scope of information diffusion” (Hagen *et al.*, 2018, p. 9).

Table 1 - Network Overview metrics

Network Overview metrics	
Average Path Length	“The average of the shortest path between any pair of nodes in the network” (Alamsyah, Sarniem, and Indrawati, 2017, p. 2). It measures the efficiency of information diffusion in a network (Ouyang and Reilly, 2022).

Average Degree	“Average number of links per node” (Alamsyah, Sarniem, and Indrawati, 2017, p. 2).
Network Diameter	“The maximum distance between any pair of nodes in the graph” (Alamsyah, Sarniem, and Indrawati, 2017, p. 2).
Density	“The ratio of existing number of edges and maximum possible edges between all nodes” (Ibid.).
Modularity	“Identifies the number and size of communities formed in the network” (Ibid.).

Table 2 - Node Overview metrics

Node Overview metrics	
Eigenvector Centrality	“Eigenvector centrality is a measure of the influence of a node in a network. It assigns relative scores to all nodes in the network based on the concept that connections to high-scoring nodes contribute more to the score of the node in question than equal connections to low-scoring nodes.”
Betweenness Centrality	“Betweenness is a centrality measure of a vertex within a graph (there is also edge betweenness, which is not discussed here). Betweenness centrality quantifies the

	number of times a node acts as a bridge along the shortest path between two other nodes.” (Ibid.)
Degree Centrality	“ Node Degree - The degree of a node in a network is the number of connections it has to other nodes (...). Out Degree - The number of edges leaving a vertex. In Degree - The number of edges entering a vertex.” (Ouyang and Reilly, 2022)
PageRank	“PageRank values indicate the level of authority and trust given to Twitterers by other Twitterers” (Hagen <i>et al.</i> , 2018, p. 7)

Relational data obtained from SNA can further be of use for graph visualisation, as social networks can be “mathematically modelled as graphs” (Khaing Phy, 2015, p. 1). For this reason, graph theory has inevitably become connected to SNA. The visualisation of social networks as graphs has many applications and advantages for this study: it allows the visualisation of the type of network and clustered communities; it allows the identification of information dissemination and diffusion patterns that otherwise would have not stood out from tabled data; it shows the degree to which sparse communities are connected.

As mentioned before, qualitative analysis will complement the quantitative one, specifically by looking at the content of one of the main actors in the network analysed. The goal of this section is to unmask antivaxxers’ framings of the Covid-19 pandemic and uncover the antisemitic underlying narratives behind it. Framing is a vital practice for a social movement and as it influences the interpretation and the processing of information of the target audience (Nelson, Oxley and Clawson, 1997). Frames are seen as having a rhetorical power, able to highlight a certain perception of reality by making specific information more salient than others (Kuypers, 2009). In the context of analysing conspiratorial

content on social media platforms, analysing frames is key as content moderation policies induces conspiracists to use coded words and dog-whistles to frame a certain issue and assign blame to what is considered to culprit of a controversial issue, as has been the case with Twitter and the Covid-19 pandemic (Papakyriakopoulos, Medina Serrano and Hegelich, 2020; Media Diversity Institute, 2021). Framings, if aligned, represent the foundation of narratives, understood here as “a course of action with a beginning, a middle (often a complication) and an end (often a resolution) used by humans to make sense of experiences” (Aukes, Bontje and Slinger, 2020). Narratives in this case represent old-age antisemitic canards that have long represented hatred towards the Jewish people whereas frames are constituted by decontextualised conspiratorial coded words framed in specific ways. In order to infer meaning to a concealed message, an inductive latent pattern conventional content analysis will be performed. Latent content analysis is used to interpret “what is hidden deep within the text” (Kleinheksel *et al.*, 2020, p. 129). As the analysis is intended to recognize visible objective characteristics of tweets (i.e. the use of word “globalist”) a latent *pattern* analysis is more appropriate rather than a latent *projective* analysis (Kleinheksel *et al.*, 2020). Moreover, an inductive reasoning method will suit better for this analysis to better describe and code tweets in order to avoid using pre-conceptions, selection bias and allow the categorisation of data to emerge from the data itself (Hsieh and Shannon, 2005). Overall, this method and the choice to have a mixed quantitative-qualitative approach, allows for a better detection of underlying themes and narratives as it permits to go beyond a positivist account of the phenomenon of conspiracy theories online, as it is characterised by post-truth era and heavily influenced from content moderation policies.

Research Design

The research design for SNA consists of five stages:

1. selecting sample;
2. collecting data;
3. preparing data;
4. choosing and applying the method of social network analysis and
5. drawing conclusions (Musial, 2018, p. 2232).

For the selection of the sample, NodeXL was used to retrieve a dataset of relational data (an *edge list*) based on what is called a Twitter Search Network which retrieve tweets for the previous 3-5 days based on search queries, keyword, hashtag or username (Social Media Research Foundation, 2016). The basic version of NodeXL uses Twitter's search application programming interface (API) to retrieve data and metadata about tweets containing a chosen hashtag from which an edge list will be retrieved, containing data about the relationship between nodes, be it a reply, a mention or a retweet containing the chosen hashtag. In this case, the hashtag #DittaturaSanitaria was selected. It translates to English to *health dictatorship*, a concept that has been present in antivaxxers protests in France, Germany and Italy, in which the Covid-19 pandemic is thought to be a tool of control for Elite to promote a new world order and control their populations (Karakoulaki and Dessì, 2021). This narratives pertains to more established CTs of NWO and GR.

The first one, generally asserts that a secret global elite controls world events to the end of enslaving humanity through the establishment of a authoritarian world government, currency and religion and by depopulating the global population for better governance (Amadeu Antonio Foundation, Expo Foundation and HOPE not hate, 2021). The GR CT can be seen as Covid-19 specific variant of NWO, as it originated after the 50th World Economic Forum (WEF) in which business and political leaders devised a resilience plan in the context of the Covid-19 pandemic, which they dubbed *Great Reset* (McNeil-

Willson, 2020). This was picked up by conspiracy movements as an attempt by secret Elites to “subjugate the planet by taking control of the world economy, and manipulating medical data with the aim of population control” (Amadeu Antonio Foundation, Expo Foundation and HOPE not hate, 2021, p. 23). Therefore, the hashtag #DittaturaSanitaria was selected as it enshrines elements of both CTs. Moreover, it contains both elements this research wants to analyse: antivaxxer’s framing of the Covid-19 Pandemic, an underlying antisemitic narrative of control by Elite, dog-whistle for Jews.

In order to mitigate the limitation on the restricted period of data collection granted by the basic version of NodeXL, data was collected on the 25th of February and included data since the 23rd of February. Such decision was taken as these days correspond with the start of the Russian invasion of Ukraine, a significant world event which was expected to potentially fuel uncertainty and conspiratorial thinking as shown by the literature analysed before.

The collection of data based on a hashtag Twitter Search Networked resulted in the collection of 2336 edges and 1756 nodes. The edge list resulting from it was then imported in Gephi, which is an “interactive visualization and exploration platform for all kinds of network and complex systems, dynamic and hierarchical graphs” (Khaing Phyto, 2015, p. 39). The graph is directed. The choice of analysing a directed graph instead of an undirected one stemmed from the need to have more granular data for Degree Centrality, in order to see the difference between in-coming and out-going interactions. Moreover, as the basic version of NodeXL only allows the collection of a small network, more information about the type of interactions was deemed an advantage, rather than a limitation.

Preparation of data consisted of filtering hashtag hijacker, loose components of the network and the selection of a layout algorithm that would make hubs stand out from the crowd. This was only possible after visualising the network graph identification of the biggest hubs. Indeed, one of the biggest hubs that stood out, was a hashtag hijacker which would have skewed the analysis of conspiratorial

framings of the pandemic. Ethical considerations at this point were crucial as the network consisted of vulnerable subjects. For this reason, and following ethically-informed best practices, full anonymity was granted to the data subjects (Mason and Singh, 2022). This originally presented a limitation for what will be the next step of the analysis: content analysis. Mitigation steps were undertaken in the form of key word selection, in which only terms referring to a perceived enemy were transcribed, and if too specific, paraphrased in a way that the reporting of such expressions would not lead to the identification of users on Twitter. Paraphrasing full texts was also deemed not ethically justified for the scope of the research, representing too high of a risk of disclosing the identities of the data subjects.

The analysis and the drawing of conclusions, the 4th and 5th step were guided based on two objectives this analysis aimed to achieve: the description of the overall structure of the network – the *Network Overview* - and the identification of key players in the network - *Node Overview* -. The *Network Overview* section was further divided in two parts. First, network metrics were considered (see Table 1) and used to evaluate general patterns of information diffusion. Second, modularity algorithm was used to fragment the network in clusters and perform a mesoscopic analysis to gauge information diffusion patterns at an even lower level. *Node overview* then consisted in the compilation of a ranking table based on the scores key players performed in centrality metrics (see Table 2). This allowed for the identification of the most relevant actor in the network, which Tweets were retrieved thanks to a social media crawling software: CrowdPulse (Musto *et al.*, 2015).

The Tweetlist of the selected Twitter account was then used to perform an inductive latent pattern conventional content analysis. The first step consisted of the immersion in the data to first filter out irrelevant content and secondly to get familiar with the type of content. The second step consisted in the identification of units of meaning, which were identified to be different variations of antagonization of a perceived enemy. These included institutions,

conventions, specific public figures, pharmaceutical manufacturers etc. These all related to conspiracy theories of NWO and Great Reset. As too many labels and frames were discovered, condensation technique was used (see Figure 1) to better group tweets in coding categories. Coding categories were then formed, based on similarities condensed units of meaning shared, which turned out to be different types of framing of the *antagonistic Other* and the emotional drivers of such tweets. Lastly, underlying themes were extracted, to connect them to broader and older antisemitic narratives.

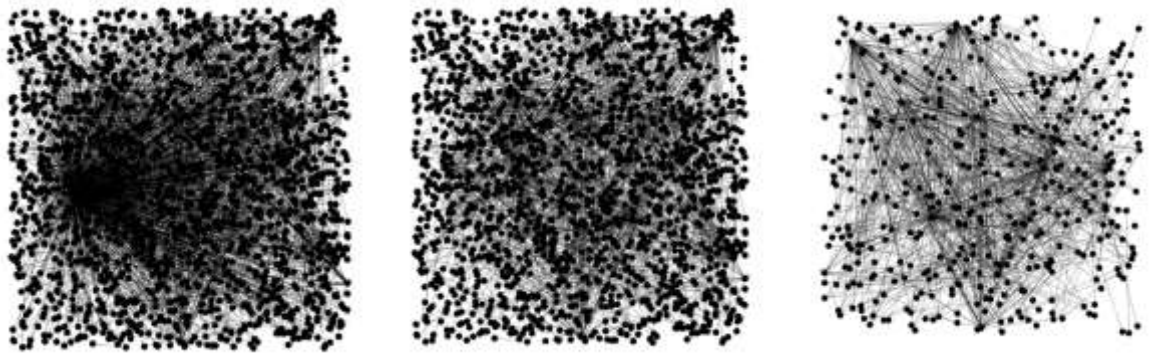
Analysis

Social Network Analysis

Data Preparation

The network analysed consists of 1764 nodes and 2335 edges. The Graph type is directed, which means that it is possible to see the direction of interactions, something typical for Twitter SNA as users might be connected but not follow each other (as opposed to Facebook “friends” connections) (Hansen, Schneiderman and Smith, 2020, p. 23). First, all edges were assigned the same weight (1.0), as the number of interactions among 2 nodes is not a relevant data point to include in the analysis, as this SNA focuses more on the *quality* rather than the *quantity* of relational data. Thanks to pre-screening observations, it was possible to identify a relevant hashtag hijacker, which was then filtered out as analysing interaction between polarised communities is beyond the scope of this research. This reduced the size of the network drastically: 1761 Nodes and 1333 Edges. Another common filtering strategy is to focus on the components, which can loosely be defined as islands of nodes. The filter “Giant Component” is then applied which allows the visualisation and the analysis of network metrics of only those nodes and edges that are present on the biggest island, or more technically said, “a connected component of a network that contains a significant proportion of the entire nodes in the network” (Future Learn, 2017). At the end of the data preparation step, the network consists of 444 Nodes (25,26% visible) and 881 Edges (71,63% visible) (see Figure 3).

Figure 1 - The three stages of filtering



Network overview

It is now possible to calculate network metrics of the overall community, which will allow the measurement of the information dissemination.

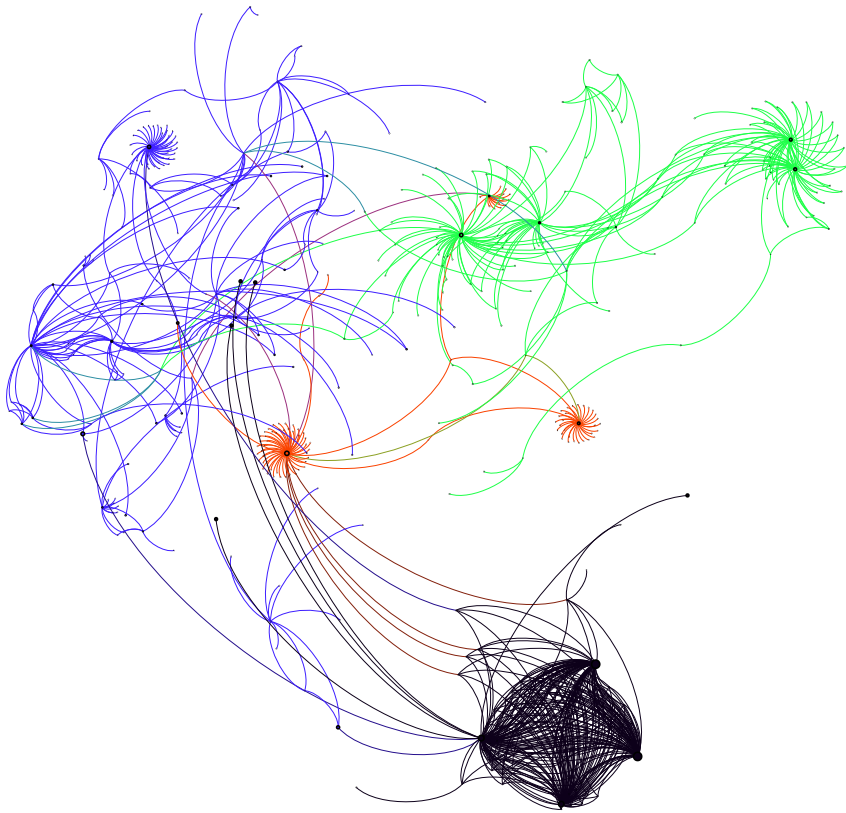
Table 3 - Network Overview metrics

Metric	Value
Nodes	444
Edges	881
Diameter	3
Modularity	0.696 (no. communities 4) Res: 4.0
Average Degree	1.984
Average Path Length	1.54
Density	0.004

From Table 3, we can observe that the network diameter is 3, meaning that longest distance between the furthest nodes is of 3 connections, which indicates a compact network. However, this is not reflected in the graph density metrics (0.004), which calculates the “existing number of edges and maximum possible edges between all nodes” (Alamsyah, Sarniem, and Indrawati, 2017, p. 2). This is an interesting result as it shows the importance of community gatekeepers, which help information flows as they are the “only connection between communities” (Alhajj and Rokne, 2018, p. 2275). Their social role will be analysed in the next section. The compactness of the network can also be seen through the average path length value (1.54), which is defined as “ the average distance along the shortest paths between any possible pairs of nodes in the network” (H. Fakhurroja *et al.*, 2019, p. 2). This means that it only takes one connection and a half for potential information diffusion. This is an especially relevant result if paired with the average number of interactions between users. Indeed, the average degree value is 1.984, something that makes up for such a low-density network. Relational data also allows to perform community mining, which sizes will be visualised and analysed later. Another relevant metrics to

better understand the structure of networks is modularity. It is defined by the “fraction of edges within communities minus the expected value of that fraction if the positions of the edges are randomized” (Newman, 2012, p. 28). A positive score signals the presence of a community structure whereas a negative one indicates the lack of it. The value for this network is 0.696 with resolution set at 5.0 which allowed the discovery of 4 communities (see Figure 2).

Figure 2 - #DittaturaSanitaria network and related clusters

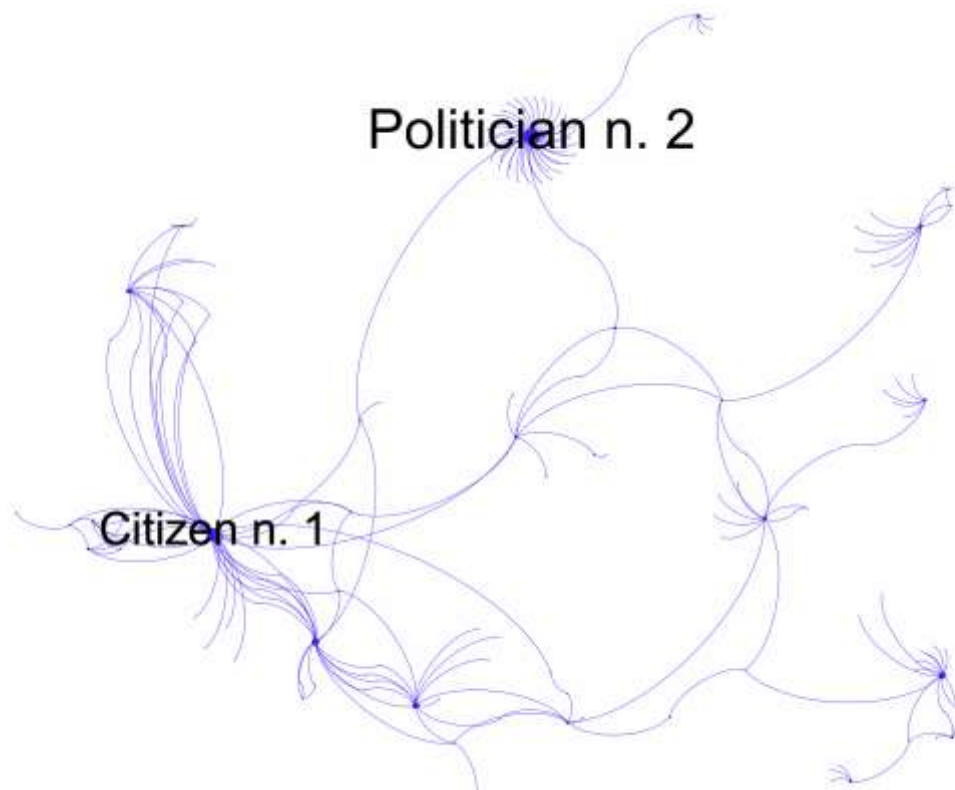


Mesoscopic Analysis

Thanks to the modularity metrics, Gephi allows the detection of the number of communities, also referred to as clusters or modules, and understand the type of communication each community has. The graph was laid out using the Force Atlas algorithm, which makes graphs more compact, readable, and can show authorities more central than hubs as described inside Gephi 0.9.5. Gephi performs the colouring of communities based on their clustering. From figure 4, we can observe all the 4 communities distinctively: the Blue one, which corresponds to 34.01 % of the whole graph; the Green one (26.13%); the Red one (21.17%); and finally, the Black one (18.69%).

Blue

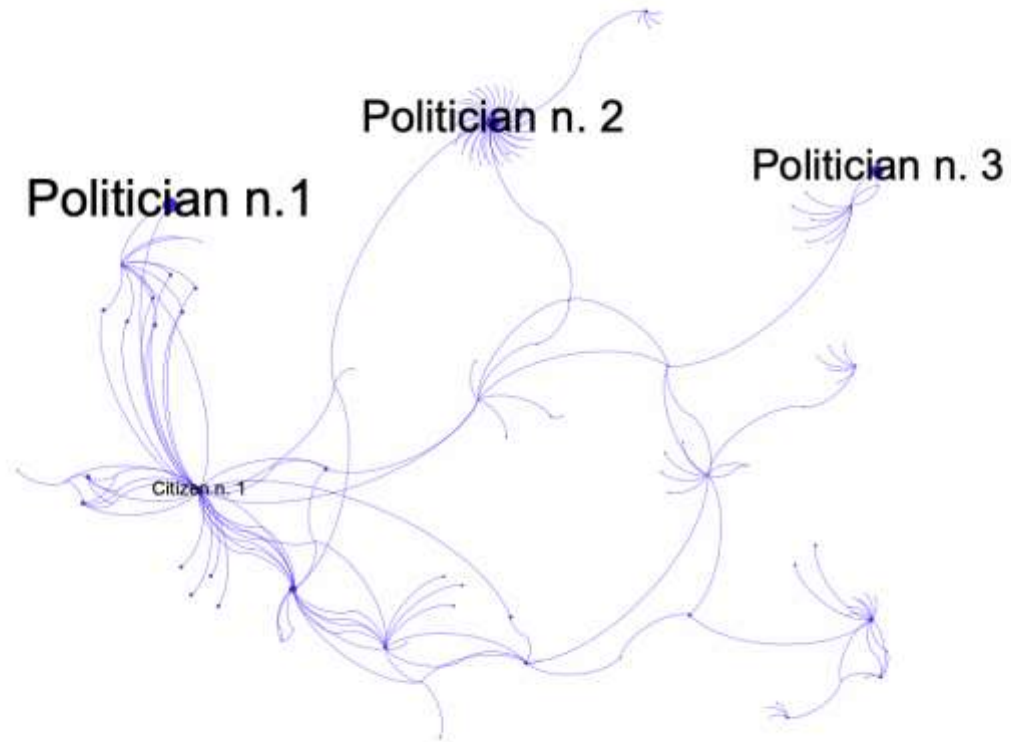
Figure 3 - Blue x Degree Centrality



The Blue community represents the biggest cluster in the filtered network graph. It accounts for 34.01% of the whole network's nodes (151) and 213 edges. This cluster consists of 2 main hubs (see Figure 3), which are the most connected nodes (Alhajj and Rokne, 2018, p. 2276). Average Degree, the number of connections a user has in a given network, is 1.441 which is a relatively small number for the biggest cluster of this network. Diameter, which is the "the maximum distance between any pair of nodes in the graph" (Alamsyah, Sarniem, and Indrawati, 2017, p. 2) is 2, meaning that it takes only 2 directed connections to link the two furthest nodes. Average Path Length (1.614) which is the highest of all 4 clusters meaning it has the least efficient information diffusion of all communities. This is also confirmed by its graph density (0.009) which is the lowest among all communities identified. Finally, its positive modularity score is the highest among the 4 communities and indicates a high level of fracture within this cluster's sub-networks.

As Eigenvector centrality indicates a user's power to spread information due to its connectedness and the number of connections, it is relevant to note that three accounts that rank highest by this metrics are politicians (see figure 6). Indeed, Eigenvector centrality is an indicator of popularity and can inform what the main type of information is about. It follows that high eigenvector score translates to "high information spreading power" (Klofstad *et al.*, 2019, p. 7). They all three are political party leaders in Italy and belonging to the far-right.

Figure 4- Blue x Eigenvector Centrality



The biggest hub is represented by Politician n. 2, meaning it is the node with the highest degree. By looking at their interactions, it is possible to get a general glance of the conversation around the hashtag #DittaturaSanitaria and how it is institutionalised. Thanks to the data collected through NodeXL, it is possible to filter and analyse the tweets based on the sender (Source) and receiver (Target). The user in question has the highest degree score (42) of the Blue community, which is further broken down to In-Degree and Out-Degree scores as the graph is directed. In fact, In-Degree (41) represents the number of interactions directed at a target node (Replies, Quote, Retweets) while Out-Degree (1 in their case) represents the number of Tweets produced by a user and disseminated on the network. Although an exhaustive content analysis is out of the scope of this

section of the analysis, a quick glance on the tweet posted by Politician n. 2 can inform on the type of information disseminated. Their only tweet contains words such as: “global network”, “lobby”, “democratic emergency” and of course the hashtag #dittaturasanitaria, terms which have an extensive use in conspiratorial language of conspiracy narratives such as NWO and Great Reset, as will be shown later in the analysis.

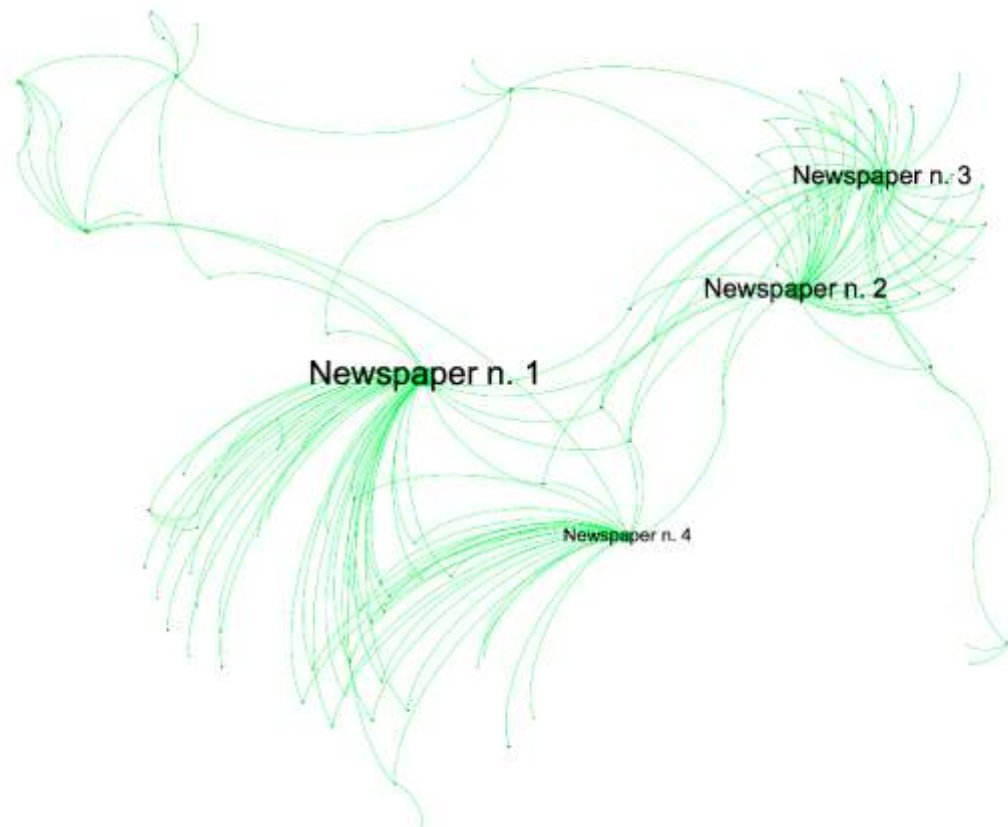
As anticipated before, there are users who play a significant role in connecting a loosely connected network with low density. Such role is filled by brokers, which can be defined as conversation gatekeepers which are the “only connection between communities” (Musial, 2018, p. 2275). Such role can be measured by the betweenness centrality metrics, which is “the number of pairs of other members who can converse with each other directly through a user with shortest distance” (Ibid. 2275). Klofstad *et al.* (2019) define users with highest betweenness centrality as able to control the flow of information in a network, while Easley and Kleinberg, (2010) highlights their importance in acquiring “early access to information that originates in multiple, noninteracting parts of the network” (p. 67). Citizen n.1 in this case can be considered as the “broker” (Alhajj and Rokne, 2018, p. 2275) of the institutional cluster, as their betweenness score is almost 7-fold higher than the second ranked user and it is ranked 2nd in the overall network of the hashtag in question. The user’s content does not include conspiratorial language as was the case with politician n.3, but antagonises the Italian prime minister based on the perceived restriction of civil liberties and constitutional rights.

Green

The green cluster (see Figure 5) is the second largest cluster in the whole network. It accounts for 26.17% of all nodes and consists of 116 nodes and 255 edges. As can be seen by the graph displayed in Figure n. 8, which node sizes are ranked based on degree centrality, it is mainly constituted by 4 hubs. At first glance, this cluster differs from the Blue one for its density and relative short


paths. Indeed, the graph density is 0.019, the average path length is 1.016 and diameter is 2. On top of that, the average degree value is 2.198, meaning that each node has at least 2 connections, which is remarkable for a network which diameter is 2. However, it is important to note that the overall graph, and therefore the community partitioned from it, is directed, and contains self-loops, meaning that a node can have a degree of 2 by connecting to one *alter* node only and to itself (which is the case when a user posts a tweet that is not a reply to another tweet or a mention).

Figure 5 - Green x Degree Centrality



The first 4 biggest nodes with highest degree centrality distinguish themselves from the rest of the nodes as they all are Twitter account of online newspapers. A closer analysis of the tweets collected through NodeXL hashtag-based search,

reveals the type of information diffused and explains the density and compactness of this cluster. Indeed, out of 167 tweets which contain either of these 4 media outlets, there are only 2 unique texts. As these two texts cannot redirect to a single user, as they have been disseminated through a social media copy-paste online action generated from a Telegram group, they can be reported and translated here:

1. “The evidence of the correlation of deaths with vax is clear to everyone except the criminals who want to impose them. #ViVi  https://t.me/entra_in_v_v #vaccinouccide #novax #healthcaredictatorship #CriminalGovernment #nogreenpass #Nuremberg2.”
2. “We #ViVi are force of NON-VIOLENT FIGHT! We claim FREEDOMS AND RIGHTS and accuse you criminal racist Nazis of raping the Constitution and vandalizing inalienable Rights. #novax #CriminalGovernment #NoGreenPass #obligationoover50 #HealthDictatorship.”²

These tweets are targeted to online media outlets which have reported on ViVi’s vandalization of Italian vaccination hubs, to the end of claiming responsibility of the attack online and gain visibility. Meta has recently conducted an operation to take down this Italian adversarial network called “Viral Vendetta” (V_V) which is estimated by Graphika (2021) to have 20,000 active users. Meta’s report states the following: “The people behind this operation relied on a combination of authentic, duplicate and fake accounts to mass comment on posts from Pages, including news entities, and individuals to intimidate them and suppress their views.” (Gleicher, 2021). Although a close analysis of the content of the tweets and their underlying framings falls out of the scope of this

² Both tweets are translate by the author

section of analysis, these findings help to understand better the network structure and patterns of information diffusion. For example, by taking a closer look at the neighbourhood of the 4 hubs (see Figure 8 and 9), most nodes are connected to at least 2 hubs, showing how closely connected and how coordinated these online actions are.

Figure 6 - Close-up on Green Cluster n.1

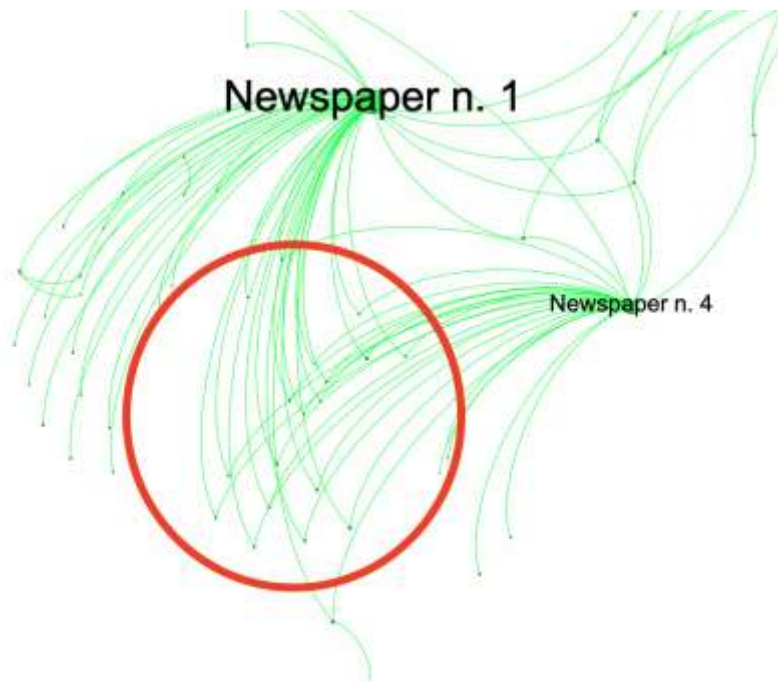
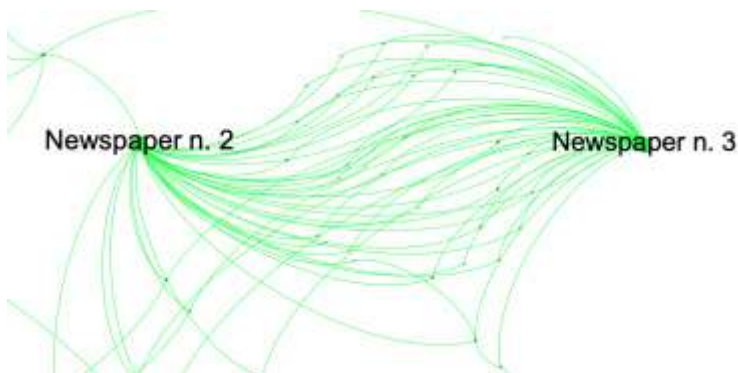


Figure 7 - Close-up on Green Cluster n.2



Red

The third community, the Red one (see Figure 8), consists of 21.17% of the whole network. It is characterised by 3 main hubs which suggests that it is a sub-network based on retweets, replies and quotes of the content shared by the central players. Average degree is 1.032 as most nodes connect mostly to one single hub each. Indeed, average path length is 1.333 and diameter is 2. This is a more fragmented cluster than the ViVi one, as can be seen by the high modularity score, 0.581, suggesting a greater division than the ViVi one but a smaller one than the Institutional one. As we can see from Figure 10, 2 hubs stand out based on their Degree Centrality ranking, which have been called Citizen. 2 and Citizen. 3.

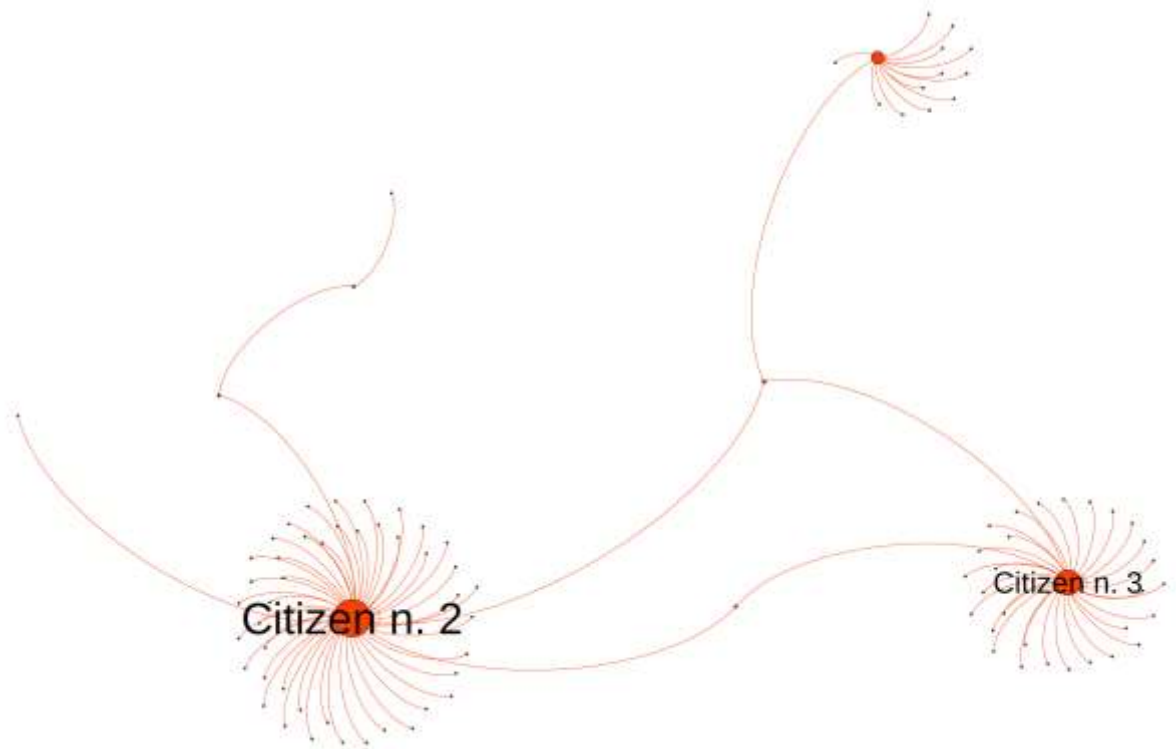


Figure 8 - Red x Degree Centrality

Citizen n. 2 has the highest (and only) Betweenness Centrality score of this cluster and the third highest in the overall network. In addition to having the

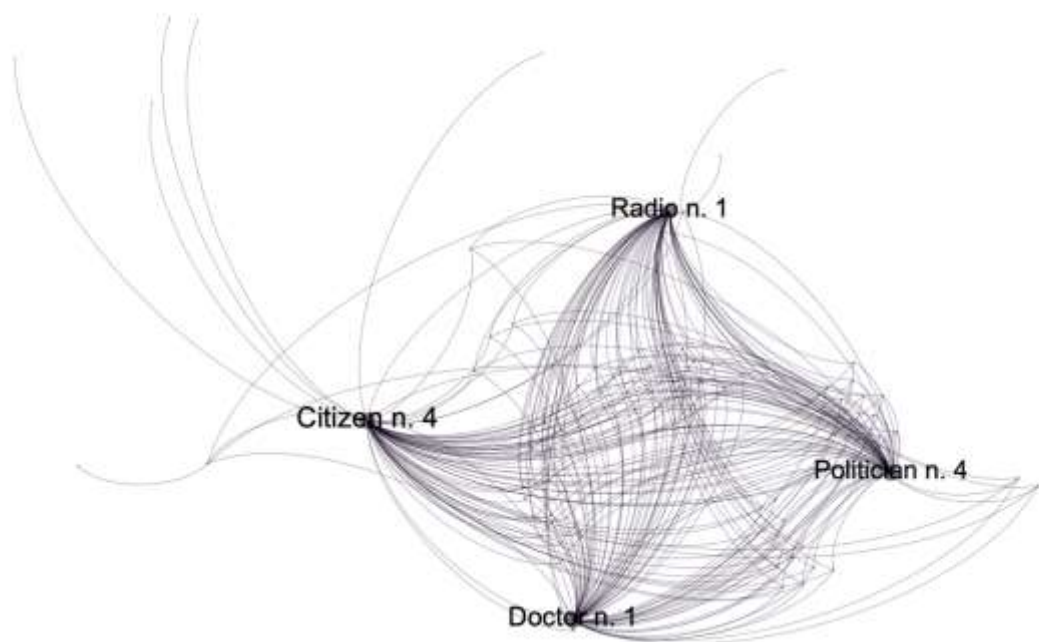
highest degree centrality in the Red cluster, it also is the 7th in the overall network and the 3rd for PageRank score, suggesting a high level of authority in the network (Alhajj and Rokne, 2018; Klofstad *et al.*, 2019). Citizen n. 3 instead does not rank in betweenness centrality, has a relatively low degree centrality (13th) but ranks high on PageRank score (5th) in the overall network. These values indicate the importance of these nodes and why it is essential to look at the content of their interactions. Out of the 95 tweets retrieved by NodeXL, including the original tweets produced by the 2 hubs in question, we can retrieve 6 unique texts, 2 belonging to Citizen n. 2 and 4 to Citizen n. 3. The 2 tweets from Citizen n. 2 do not contain violent or conspiratorial terminology, allusions to secretive powerful forces responsible for health mandates in Italy, but simply express anti-scientific views and resistance to Covid-19 health measures. However, they both contain the hashtag “#DittaturaNaziSanitaria” (Nazi Health Dictatorship), which can be seen as a framing closer to the more covert conspiracy narratives such as the NWO and GR. Citizen n. 3’s 4 tweets also focus on vaccine hesitancy and resistance to health measures, all containing either external links or multimedia content (videos, pictures). One particularly stands out, which contains a screenshot of a telegram group’s message called “TRUTH (in English) – truth sets you free” which allegedly reports the story of two Canadian café owners serving free coffee to truckers of the Canadian Freedom Convoy³. The account of this story is followed by admonishment towards Trudeau’s policy and comparison to Canadian health measure with Nazi persecution of Jews. This shows how key players in the network that are not necessarily are acquainted with the “bigger picture” of conspiracy narratives do – either inadvertently or on purpose – leverage framings that are consequential to the mainstreamisation of anti-democratic and antisemitic sentiments. Based on text analysis only, conspiracy narratives are then leveraged on this specific network over a shared vocabulary, which will be explored later.

³ See Vieira, 2022

Black

The last sub-network is represented in Black (see Figure 9) and makes up the smallest part of the #DittaturaSanitaria network accounting for only 18.69% of nodes but also the highest number of edges (299). It consists of 4 main hubs which, differently from the Red network, are tightly connected (see Figure 12).

Figure 9 - Black x Degree Centrality



This suggests a dense network in which all main 4 biggest nodes are connected by almost the same accounts and the same content. Indeed, metadata retrieved thanks to NodeXL shows that the entirety of the conversation linked to these 4 nodes consists of one single tweet. The average degree is expectedly high, 3.602, and network diameter is 3. The tightness of this network is also represented by the graph density score, which is 0.044 and the highest among the whole network and all the other clusters. Modularity score also tells us very strikingly the patterns of information diffusion as it is 0.032, the lowest among the 4 communities, suggesting a very low level of clustering thus a compact

community structure resembling an echo-chamber. Average Path Length is 1.561, a score in line with the other clusters which reinforces the claim about the tightness of this community. The 4 users are Citizen n. 4, Doctor n. 1, Radio n. 1 and Politician n. 4. Respectively, they rank 2nd, 3rd, 4th and 5th in terms of degree centrality of the overall #DittaturaSanitaria network and also occupy the first 4 Eigenvector rankings.

Moreover, as suggested by their labels, they all perform different professions but are all associated by the unique tweet originally posted by Citizen n. 4, whose account has been suspended and ranks 3rd for Eigenvector Centrality and 1st for both Degree and Betweenness Centrality. The tweet in question, retrieved through cached pages on Google, contains an image in which a journalist fact-checks a piece of news of what was thought by an authoritative Italian newspaper to be original video footage of Russian aircrafts bombarding Kiev. This mistake is leveraged by the community to deride mainstream media and dub journalists “professional liars”, followed by the hashtags #DittaturaSanitaria and #RussiaUkraineConflict, and mentioning Politician n. 4, Doctor n. 1 and Radio n. 1. These mentions, as one can expect, are not random as they are the most central players of the whole network and can be expected to be such also outside of this specific hashtag’s network.

Overall Findings – SNA

The SNA of the overall Twitter network #DittaturaSanitaria and its mesoscopic analysis met the expectations of this research and address the structure of the networked conspiratorial veiled antisemitism. Indeed, it allowed for the identification of relevant information diffusion and dissemination patterns of a hashtag that has the potential of leading users to absorb antisemitic narratives. Table 4 shows the ranking of the users detected in the SNA based on their clusters and centrality measures.

Table 4 - Rankings of users

Rank	<i>Degree Centrality</i>		<i>Eigenvector Centrality</i>		<i>Betweenness Centrality</i>	
	Twitter Account	Module	Twitter Account	Module	Twitter Account	Module
1	Citizen n. 4*	Black	Radio n. 1	Black	Citizen n. 4*	Black
2	Doctor n. 1	Black	Politician n. 4	Black	Citizen n. 1	Blue
3	Radio n. 1	Black	Citizen n. 4*	Black	Citizen n. 2	Red
4	Politician n. 4	Black	Doctor n. 1	Black	*not identified	/
5	Citizen n. 2	Red	Citizen n. 2	Red	*not identified	/

*account suspended

In particular, the SNA found that community gatekeepers are mostly civilians and present the least conspiratorial thinking traits of the data subjects. Despite their use of a hashtag that is undoubtedly connected to antisemitic CTs of NWO and GR, the content only presents science denialism and distrust of government in relation to the Covid-19 pandemic, without allusions to who would be responsible to such health dictatorship. This is a relevant finding as it shows the more presentable face of Covid-19 CTs and more so the one of veiled antisemitism, and the role of science denialism and anti-establishment sentiment as effective tools for their propagation.

Secondly, the SNA helped find different types of information dissemination patterns thus showing different ways in which CTs can spread. For instance, the Green community showed that it is essential to go beyond a simplistic account of the presence of CTs on social media and that SNA and graph visualisation can help identify dissemination patterns which can be studied to see how veiled antisemitic narratives are born and circulate in networks. ViVi's reported coordinated action presented a high emotionally charged language accompanied by the use of the adjective Nazi referring to both the *health dictatorship* itself and to the individuals allegedly behind it. As it presents an antisemitic distortion of the Holocaust and more generally of the persecution of Jews under Nazi Germany, it can be assumed that the incubation of such rhetoric could have been artificially *injected* into this network. However, this goes beyond the scope of this analysis, but can however inform future research on the origin and spread of antisemitic narratives.

Third, the presence of the hashtag in the Black community did not match the context of the tweets present in this community. Accordingly, the hashtag was used in the context of the Russian invasion of Ukraine and of a false information spread by an Italian mainstream journal. Whether intentional or not, is beyond the scope of this result. What stands out in the context of this research is the alignment of two world events – the Covid-19 pandemic and the conflict in Ukraine – under the common conspiratorial framework of a *health dictatorship*. This shows how veiled antisemitic frames originated with Covid-19 specific CTs offer a working framework for the identification of a common occult command post behind global crises.

Lastly, the presence of Italian far-right politicians in an anti-scientific, anti-establishment and conspiratorial network indicates, although not exhaustively, how the framing of the Covid-19 pandemic as a *health dictatorship*, a frame used in established Covid-19 CTs which are based on antisemitic sub-structures, is linked to the Italian far-right. One specific politician was reported in the sample to directly engage in conspiratorial language in connection to the

#DittaturaSanitaria hashtag, implying the institutionalization and politicisation of the *health dictatorship* framing of the Covid-19 pandemic. Although antisemitism is not an exclusive feature of the far-right, this suggests that the political point of references of the Italian antivaxxer community are situated on the far-right wing of the political spectrum.

Content Analysis

Thanks to the Social Network Analysis of the Italian Twitter network of #DittaturaSanitaria, it is now possible to identify who the key players are and focus on the content of their conversation. More specifically, this next section will perform a qualitative content analysis to identify the core conspiratorial frames of the antivaxxer community beyond the *health dictatorship* one and how they connect to antisemitic narratives. Since the Black community is the densest, least fractured and containing the most connected nodes in the overall network, the next section will focus on one of the key players of this cluster: Doctor n. 1. The selection of this actor was based on the assumption that politicians' tweets are too restrictive in terms of findings due to their artificiality, publicity and language. Radio n. 1 was also excluded as the format of their tweets is exclusively journalistic, with short titles aimed at redirecting users to their website. On the other hand, Doctor n. 1 is less artificial with their language, more authentic and expresses their opinion more freely than how a politician would do. Secondly, as with the case of the sample selection for the SNA, science denialism is expected to be the epistemological hinge for conspiratorial frames of the Covid-19 pandemic, allowing the research of veiled antisemitism. Therefore, the choice of selecting a user with scientific authority appeared as the most efficient choice.

Data Preparation

900 tweets were collected from the Twitter account of Doctor n. 1. Filtering of data consisted in selecting unique texts only, and filtering of tweets without embedded links so to facilitate the manual content analysis and avoid scanning out-links. Moreover, tweets containing out-links did not have a clear grammatical structure as they mostly just reported the headers of the news the user was posting. The final number of tweets after filtering was 46. The first coding step consisted in the immersion in the data in order to get familiar with the type of content and identify the units of meaning, which turned out to be different representations and expressions of an *antagonistic Other*.

Accordingly, data was coded with labels referring to the way the *Other* was represented, and later summarised in broader condensed units of meaning. For example: the words “European biotech company” and “bio-pharma power” were initially coded respectively with *medical institutions* and *pharmaceutical company*, and later condensed to only *big pharma* as they were both deemed to be alluding at the conspiratorial framing that pharmaceutical companies have some sort of control of the Covid-19 pandemic that is hidden to the public. After having condensed units of meaning, codes were organised based on their relatedness to a common framing of the tweet, which was found to be emotional framing of the enemy. For example: *media control*, *big pharma* and *holocaust comparison* were grouped together under the coding category *Victimhood*, as they all contained elements which pointed at an enemy trying to oppress and subjugate the Italian/world population. Lastly, each coding category, and their related content, was analysed in order to find related antisemitic narratives. The results are shown in Table 5.

Table 5 - Results of Coding Process

No.	Veiled Antisemitism - <i>Condensed Units of Meaning</i>	Emotional Framing - <i>Coding Categories</i>	Unveiled Antisemitism - <i>Themes</i>	Relation to Antisemitic Narratives
1	generic “them”; “follow the money”	Hostility – Elite as Speculating	“Elites” are profiting from the Pandemic	giant octopus; Jewish greed; NWO; GR
2	Transhumanism/technophobia; satanism; health “Nazi” dictatorship	Fear – Elite as Conspirators	“Elites” are the source of the pandemic	communist Jew; blood libel; world domination; NWO; GR

3	Media control; big pharma; Holocaust comparison	Victimhood – Elite as Oppressors	Holocaust trivialisation	World domination; giant octopus; NWO; GR

Coding Categories

Hostility

The first coding category, *Hostility*, is based on the animosity towards an out-group that is supposedly trying to subjugate the minority of the population that refuse to conform to Covid-19 health measures. Messages were targeted mainly at 2 types of enemies: organisation and specific people. The first group of hostile actors included specific organisations such as the World Economic Forum (or Davos⁴) or Pfizer Group, and less explicit one like Big Pharma, Deep State, the Mainstream (media), Freemasonry, Globalists, Elite and an “Orwellian Nazi-Health Regime” (sic). The different types of generic enemies identified can all be grouped under the terms “élite” or “globalists” and vary from political, economic, media, religious and scientific ones. These words feature at the centre of the NWO conspiracy theory, where antisemitic frames are central to the bigger narrative of the Antichrist’s plan of world domination (Amadeu Antonio Foundation, Expo Foundation and HOPE not hate, 2021). Said narrative is the foundation of the *Protocols* in which the Jewish Elite is thought to plan wars, control the banks and ‘brainwash’ populations by infiltrating the media and politics (Amadeu Antonio Foundation, Expo Foundation and HOPE not hate, 2021). By mentioning multiple branches of the élite, Doctor n.1 reinforces this antisemitic trope notwithstanding the lack of clear and explicit antisemitic expressions. This is well depicted in one visual representation of Jewish control

⁴ References to Davos allude to the city where the World Economic Forum takes place (World Economic Forum, 2022)

of different professions, the Jewish Octopus, a trope also weaponised by Nazi propaganda and, before that, depicted as a two-headed Octopus representing the “historically feared double-headed alliance between Jews and Freemasons” (Henderson, 2019). Unsurprisingly, freemasonry is also present and coupled with the term “globalists” in one of the user’s tweet. Specific individuals also feature in their tweets, and they include environmentalist activist Greta Thunberg, US President Joe Biden and current Italian Prime Minister Mario Draghi. These individuals are clustered together with the organisations mentioned before and represent common targets of the far-right, both internationally and in Italy more specifically, as they are often referenced in connection to antisemitic Conspiracy Narratives NWO and Great/Big Reset (Pili and Puente, 2021).

Words such as globalist and elite can also have an economic and financial underlying assumption, if analysed through one of the oldest antisemitic trope: Jews and money. Indeed, another recurring frame is the demonisation, both literal and metaphorically, of the World Economic Forum (WEF), often referred to as Davos, the place where it takes place. For instance, one tweet suggests to “follow the money” to “understand” the origin of Covid, Vaccines and Great Reset. Here, many layers play a part into decoding such text. Apart from the explicit mention of a proven antisemitic conspiracy theory (i.e. Great Reset), Jews and greed go a long way, since the Middle Ages when they were prohibited to own land and were recruited by Christian rulers to work as money lenders at high-interest rates (Anti-Defamation League, 2022b). This still reflects in modern day Great Reset theory which core tenet is the alleged plan of the World Economic Forum’s elite – dog whistle for Jews - to subjugate the planet by controlling the global economy and depopulate the world (Amadeu Antonio Foundation, Expo Foundation and HOPE not hate, 2021). Opposition to Covid-19 vaccination in programme in France for example has displayed criticism about overrepresentation of Jews in influential sectors and therefore owning the

decision-making and financial power on how to how to manage the pandemic (Media Diversity Institute, 2021).

Fear

The second category, *Fear*, is characterised by texts indicating that there is an élite planning to essentially destroy the world as we know it. The tools or means to enact this alleged plan vary and sometimes are intertwined: economic, technological, political, and religious.

One of the most recurring unit of meaning in this coding category is brain control through the use of graphene. This is enshrined in the condensed unit of meaning of a *transhumanist agenda*. Transhumanism can be defined as a movement that purports human enhancement through technology. In the context of the Covid-19 pandemic, it has been connected to vaccine microchips and depopulation, both connected to antivaxxer's conspiracy belief system and more broadly to the Great Reset narrative (Rabinowitz, 2022). This strain of the Great Reset CT alleges that the WEF and Global Elites are planning to turn humans into cyborgs so to force them to be "subservient to elites" (Anti-Defamation League, 2020). Usual suspects involve George Soros and the Rothschild family, typical targets of both conspiratorial communities, both of Jewish descent. Transhumanism, or more generally technophobia, frequently combines with anti-globalist conspiratorial thinking and easily intersects with antivaxxer's fears of being controlled by technological means (i.e. microchip). This is well represented in one of the tweets analysed from the sample, where NWO and Great Reset elite are thought to be planning to make the world population "poor microchipped slaves" (sic). Away from mainstream media, transhumanism has also been linked to Judaism and "transgenderism": a good example can be Bilek's article "Who Are the Rich, White Men Institutionalizing Transgender Ideology?" (Bilek, 2018), where the supposed transhumanist agenda is connected to trans activism, a staple cultural fight purported by the far-right, which alludes at Jews devising the erasure of traditional gender/biological

dichotomies. It should come with no surprise that George Soros is reportedly behind this. This last frame also intersects with the frame of the “communist Jew” which claims that Jews are supposedly trying to enforce culture Marxism through the advancement of liberal policies as is the case with LGBTQAI+ rights (Amadeu Antonio Foundation, Expo Foundation and HOPE not hate, 2021; American Jewish Committee, 2021a).

A second recurring narrative in this category is the fear of an imminent catastrophe, which coincides with days after the beginning of the Ukrainian-Russian war. As also mentioned before, references to Satan and devilish plans to destroy the world, are well rooted in antisemitic narratives. These mentions are also coupled with solutions to such fear through resorting to Christian Orthodox figures which further accentuate the split between *good* and *bad*, Christianity versus Judaism. Although innocuous at first glance, the repetition of admonishments over catastrophes enacted by Satan gains more importance when coupled with clear references to the *usual* suspects: Davos, WEF, Big Pharma etc. which feature in the user’s tweets and are referred to as “the true Satanists” (*sic*). Here again, the narrative of the Elite being responsible for the decadence of Christianity combines with the ever-lasting narrative of Jewish contribution to deicide and their involvement in the advent of the Anti-Christ. Indeed, along with the advent of the conflict in Ukraine, there have been many conspiratorial explanations of the war, with both overt and covert references to antisemitic tropes (Anti-Defamation League, 2022a). Some include references to Zelensky being a Jew and a Nazi at the same time, which is a rhetoric that resonates with an older antisemitic narrative claiming that Jews are responsible for the persecution of its own people (Di Noto and Puente, 2022).

A third grouping is represented by the fear of being controlled by Big Pharma, Elite, Satanist and the WEF. Tweets frame such fear with words such “dictatorship”, “Orwellian regime” or “brain control”, mostly accompanied by the adjective “Nazi”. This word has the function of warning the reader of an authoritarian turn of democratic governments such as the Italian one in what

constitutes for antivaxxers the erasure of civil liberties and constitutional rights (Spitale, Biller-Andorno and Germani, 2021). Although at first glance fear of Nazi-like authoritarianism and antisemitism might seem as irrationally paired and mutually exclusive, however the reversal of victim-abuser dichotomy has been used in the past by antisemites (Marcus, *no date*). Nowadays, it is common in antivaxxer's discourse to liken their perceived experience of subjugation to a health dictatorship to the ones Jews had to face under Nazi-occupied territories, while still using dog-whistle expressions for Jewish domination such as Globalists and Elite (Media Diversity Institute, 2021). This is not to say that every single antivaxxer scared of a Nazi-like dictatorship is automatically an antisemite, but rather highlight the alignment of what seem antithetical frames into a common narrative of Elite wanting to control the world population which eventually turn out to demonise Jewish public figures such as George Soros or the Rothschild family (Media Diversity Institute 2021). Finally, Covid-19 health measures to mitigate the spread of the virus have been key to conspiratorial thinking and fear of control. For instance, vaccine passports are seen as an exclusionary and discriminatory practice towards antivaxxers and compared to the star of David Jews had to wear under Nazi rule (*ibid.*).

Victimhood

For the third category, *Victimhood*, tweets were selected based on accusations towards a set of people and organisation allegedly targeting a minority of the Italian and/or world population. This minority is generally identified based on their adherence to the anti-vaxxer movement and anti-establishment sentiment. One other defining variable was the comparison of the perceived plight antivaxxers face to the ones experienced by other historical religious minorities, including Jews.

One specific element that recurs multiple times is the demonisation by media outlets of anti-vaxxers as being ignorant, stupid and "evil". What is usually referred in Italian as just "il mainstream" (the mainstream), is what in English-

speaking rhetoric translates to the ‘mainstream media’. In this sense, the user indicates a sort of unified journalistic association which unanimously decide on how to cover issues and work together to demonise whoever sees “things as they truly are”, in order to cover the truth. Control of the media by a set of people is however a frame that has long been leveraged in antisemitic conspiracy theories, both new and old, as is both the case with the *Protocol of the Elders of Zion* and the NWO. In the first case, the book written by the Russian Secret Police in the early 20th Century condemned a clandestine group of Jews using their influence in the international media to take over the world (American Jewish Committee, 2021b) whereas in the NWO CT control of the media is recognised as a core mission of the Globalist Elites “enslave mankind” (European Commission Directorate General for Justice and Consumers and Institute for Strategic Dialogue, 2021, p. 19).

Doctors who resist or have resisted to the mandatory vaccination campaign for healthcare personnel and have consequently been banned from their profession also are represented as being victims of the “system” and of big pharma’s interests. Even if it is on its own a standing conspiracy narrative, the “Big Pharma” conspiracy theories has been connected to antisemitic narratives of great reset and NWO. For instance, a joint report from the European Commission Directorate General for Justice and Consumers and the Institute for Strategic Dialogue (2021) found Covid-19 vaccine-related antisemitism frames which pointed to Pfizer CEO and AstraZeneca Chairman to be in cahoots with Jewish investors to either “control sterilise or kill the non-Jewish population” (p. 17). This is just an example of anti-vaxxers’ references to Big Pharma which are connected to antisemitic frames, which can be seen as a continuum of long-standing antisemitic canards about Jews spreading diseases and attempt world domination through disease (Crawford, 2020).

One more sub-category includes more direct comparisons to other historical minorities that have been persecuted, such as Christians in Syria, Copts in Egypt and Jews in Germany. In this specific tweet for instance, Doctor n.1 projects

anti-vaxxers as isolated and ghettoised “outcast minority” just as the religious groups abovementioned. This can be tied to a more recent trend of anti-vaxxers especially in Italy, France and Germany, which sees Covid-19 health measure comparable to Nazi dictatorship in Germany. More specifically, it sees unvaccinated people wearing reproductions of the Yellow Star of David used in Nazi Germany to identify Jews, saying “unvaccinated” or “stop vacciNazi” instead of Jew or Jude (Media Diversity Institute, 2021, p. 8). Although contradictory to older narratives such as NWO, it still is a distortion of the experience of the Holocaust and more than anything represents the phenomenon of veiled antisemitism: people unwillingly or unaware of spreading antisemitic frames when supporting conspiratorial movements such as the case with Covid-19 anti-vaxxers.

Overall Findings – Content Analysis

The content analysis performed allowed to inductively search for the antisemitic latent narratives of a noteworthy antivaxxer conspiracy theorist. This process allowed for the identification of the main unit of meaning used by the central player selected from the SNA, namely the *antagonistic Other*. Codes were assigned for each appellation of the enemy and were found to be common antisemitic dog-whistles or coded words employed in established Covid-19 CTs NWO and GR. Hence, the vocabulary used by the doctor is one typically associated with antisemitic frames of the pandemic, which predicts the presence of broader antisemitic narratives behind the content of their tweets.

Emotionally charged words and expressions were found to be the categorization element for this sample, thus allowing to understand the framing of the Covid-19 pandemic and situate their tweets in relation to established antisemitic narratives. The main antisemitic themes found were: jews profit from the Covid-19 pandemic; jews are the source of the pandemic and narratives of Holocaust trivialisation.

Lastly, the antisemitic underlying narratives supporting the structure of the different frames of the Covid-19 pandemic represented the binding factor of the *chain of equivalence* of Covid-19 CTs. In particular, the observation of the presence of many different types of antagonistic institutions (i.e., financial, political, religious, social, technological and medical) suggested the existence of a single entity behind all evils and crises in the world. Specifically, the employment of the hashtag #DittaturaSanitaria in a tweet concerning the Russian invasion of Ukraine confirms this finding and allows for the identification of antisemitism as an epistemological tool to form a *monological belief system*.

Discussion

This chapter will be structured as follows: first, the main findings of the SNA and the content analysis will be discussed in relation to the academic debate. In particular, attention is devoted to what the congruencies and differences with the literature are, together with the additions this research might bring to the field of CTs. Second, the findings of both analytical steps will be summarised in order to answer to the research question and situate this study in the broader academic debate of Antisemitic conspiracy narratives during the Covid-19 pandemic.

SNA

The SNA was divided in two main parts: network overview and node overview. The network overview immediately showed that the community detected through the selection of the hashtag #DittaturaSanitaria was a compact community. Although it is complicated to assess the level of echo-chamber effect due to technical and computational limitations, the study qualitatively assessed the homogeneity of the network in question and its mesoscopic structures based on community detection algorithm.

To this end, the network overview provided insights into diffusion patterns for a specific topic, '*health dictatorship*'. As this hashtag contains what can be referred to as higher-order beliefs of distrust of government and science denialism, this study assumed that the network resulting from it would be a tight one based on the literature on post-truth era, psychological needs as predictors of conspiratorial thinking and the consequential social need of in-group building and homophily. The diameter of the network (3), the average degree (1.984) and the average path length (1.54) confirm the tightness of the network and how an emotionally charged topic can cause an echo-chamber effect. Although, as stated before, a quantitative analysis of the echo-chamber effect through methods of SNA is beyond the scope of this study, the average path length in particular indicates the presence of central hubs which are likely to polarise the

conversation in this network thus spurring topical cyber-cascades. Interestingly, the modularity score showed a positive level, marking the presence of a fractured network with many sub-communities.

The community detection algorithm offered by Gephi allowed an analysis of the mesoscopic structure of the network, its clusters and the topics discussed within them. Therefore, the next paragraphs will tackle

- 1) the typology of the clusters,
- 2) the topic addressed within them and
- 3) the type of content that central players diffuse in them and what psychological/political drivers they respond to for each community.

Blue

Topology

The biggest cluster of the #DittauraSanitaria has 151 nodes and 213 edges, has 2 main central hubs which respectively are a far-right populist politician and a what can be considered a citizen. Diameter (2), the average degree (1.411) and the average path length (1.614) suggest a tight network. Interestingly, the far-right politician has the highest eigenvector centrality score in the biggest cluster of the overall network, which indicates a “high information spreading power” (Klofstad *et al.*, 2019, p. 7). The 2nd and 3rd highest ranked users in terms of eigenvector centrality are also two renown Italian far-right politicians, clearly demonstrating the nature of this sub-network and the reason behind this clustering. The conspiratorial nature will be assessed in the next paragraph, however the fact that there is a strong presence of far-right politicians echoes with the literature on conspiracy theories and conservatism. Even more so, their role as information spreaders, highlighted by the mathematical metric of eigenvector centrality, empirically proves the connection between the Italian far-right parties, science denialism and, ironically enough, distrust in government. This is suggested by their presence in a network whose main reference is the alleged presence of a ‘health dictatorship’ in Italy, shows that

conspiratorial information diffusion goes through the institutionalization and the mainstreaming of conspiracy beliefs.

Topics

The tweets of Politician n. 2 contain terms such as “global network”, “lobby”, “democratic emergency” and the hashtag ‘health dictatorship’. These are words that allude to the presence of conspirators directly responsible for a democratic emergency due to a perceived authoritarian shift by means of health measures. This observation suggests that radical right populist parties contribute to the spread and the mainstreamisation of fringe narratives with coded words and dog-whistles and have the means and the authority on social media to successfully diffuse information which have the potential to harm democratic and health institutions. Moreover, the link between conservatism and conspiratorial thinking is marked here by the employment of highly emotional language and allusions to secretive and loosely defined powers (i.e. global network; lobby) which have the potential of appeasing their audience’s existential and epistemic needs. Lastly, politician no. 2 is the only one contributing a tweet to the hashtag #DittaturaSanitaria, effectively institutionalising this framing of the pandemic and representing the social need of in-group building by individuals associating with said framing.

Citizen no. 1 acts as a broker and conversation gatekeeper in this sub-network due to their high betweenness centrality score. The content shared by this user strictly relates to anti-government and anti-scientific sentiment, without neither direct nor indirect references to conspiracy theories. That is, there is an overwhelming presence of direct opposition to Italian Prime Minister Mario Draghi, to the health measure employed to curb the spread of Covid-19 and the denialism of their scientific utility. Therefore, opposite to what has been found in the tweet of politician no. 2, the references to scientific denialism and distrust of government, both considered predictors of conspiratorial thinking, do not match with conspiratorial language epistemologically and phenomenologically.

Conclusively, conspiracy thinking, intended here as the belief in the presence of secretive powerful forces manipulating events is not used to make sense of the perceived oppressive health measures put in place by the Italian government. On the contrary, resistance to vaccination campaigns and health passes is expressed through concerns over the constitutionality and legitimacy of these tools. Although statistical validity is beyond the scope and technical capabilities of this study, a tentative explanation can be that community brokers are more successful in tying separate communities by leveraging science denialism and distrust of government rather than directly employing either explicit or implicit references to secretive powerful forces, as was the case with politician no. 2. In this case, SNA helped understanding the type of content leveraged based on users' positioning and role in a network. This can be seen as a more subtle version of the employment of the hashtag #DittaturaSanitaria, remarkably showing that the more presentable face of antisemitism in general goes through anti-establishment and anti-scientific sentiment, serving both as features of epistemological hinges to conspiracy thinking.

Green

Topology

The second biggest cluster has 116 nodes, 255 edges and has 4 main central hubs which are all Twitter account of Italian local newspapers. Diameter (2), the average degree (2.198) and the average path length (1.016) suggest an even tighter network structure than the overall network and the Blue one. Relational data and graph visualisation help understand the topological nature of this community: the 4 main hubs are 'targeted' with directed interactions, which in this case could either be mentions, retweets or quotes of users accounts belonging to the ViVi social movement. Moreover, within the 255 interactions of this community, there are only 2 unique texts, which if coupled with the visualisation of the interaction between the nodes (see Figure 6 and 7), showcases the extent of a coordinated online action (Federici and Braccini,

2020). SNA, and more specifically relational data and graph visualization, yield a great advantage as they can help visualise coordinated targeted campaigns online. Although the magnitude of this campaign cannot be gauged from the collection of data of 4 days, this shows another form of conspiratorial content diffusion. Indeed, antivaxxers are commonly considered a unitary social movement by mainstream media (Gobo and Sena, 2019), although more attention should be devoted to their tactics and modus operandi. In this case, SNA allowed to go beyond the simple study of the presence of CTs on social media, instead looking at their “networked structure” (Leal, 2021) to critically understand their form and dissemination.

Topics

As is the case for this sub-network, V_V’s employment of emotional and conspiratorial language differs from regular citizen’s information diffusion patterns and political objective. V_V is a perfect example of a conspiratorial online community in which psychological needs are satisfied through the networking of CTs and the exploitation of social media platform.

Their stated goal, as reported in Graphika’s report, is to “cause the enemy’s reaction, so to unveil their evil and Nazi nature in front of everyone” and eradicating the “oppressive forces of medical Nazism” (Graphika 2021, p.3). In the sample tweets it is possible to find again the accusation of occult generic ‘Nazi criminals’, a loosely defined antagonistic other, with a very marked emotional charge (i.e. references to “rape”, “death”, “Nazi” sic.). This content satiates what were identified in the literature as existential drivers of conspiracy thinking, as V_V’s emotional content can exploit the audience’s anxiety by offering a generic (secret) target to appease such needs. Moreover, they strongly leverage a sense of victimhood against a repressive, authoritarian-like government which specifically target and discriminate unvaccinated citizens. Together, self-victimisation and antagonization of out-groups form the premises of an us vs them epistemological scheme, potentially leading to polarisation and

extremism as noted in the literature beforehand (Watkin, Gerrand and Conway, 2022).

Findings of this nature, informed by mathematical models and qualitative content analysis, have the potential of helping design counter measures for mis-dis information campaigns and curb the spread of dangerous conspiracy narratives, as is both the case with the Green cluster.

Red

Topology

The Red network is the third biggest in terms of nodes (94), it has 97 edges, it contains by 3 main hubs and is characterised by tight communities connecting to these three hubs, suggesting a community based on retweets, replies and quotes. The main players are citizens which, as seen with the Blue cluster, are expected of using the hashtag #DittaturaSanitaria to express anti-scientific content. Although it would be interesting to analyse this tight subnetwork for a longer period, the lack of interaction between users connecting to hubs, and the hubs' level of authority marked by their betweenness centrality and PageRank score, hints at what Sunstein (2017) defines as a cybercascade effect, where social trust of users online is preferred to objective validation of information. In this case, the graph visualisation coupled with a topological SNA can help measure and identify the cascades, see the form of their diffusion, and provide relevant relational data to spot anti-scientific patterns and devise counterstrategies that can halt the 'leap' into conspiratorial thinking.

Topics

This cluster is peculiar as it has a compact structure within which central nodes rank high on PageRank scores. This value indicates the level of social trust and authority given to users by others (Caverlee, Liu and Webb, 2008). Therefore, we can expect that the topics and content of their tweets are somewhat deemed legitimate without much validation. Interestingly, as was the case with Citizen

n. 1 of the Blue group, there is an evident lack of conspiratorial references to occult powers trying to subjugate populations with vaccinations, but only content expressing science denialism and antagonism towards Italian government officials.

One main difference however is found in the employment of the addition of a variant of the sample hashtag: it now is a *Nazi* health dictatorship. Though a simple variation, it indicates a higher sense of anxiety, fear, and victimhood. Additionally, Citizen n. 3's tweets present in the sample analysed over 4 days, exclusively refer to how said dictatorship is affecting youth, which adds another emotional layer to the leverages used in their content. Therefore, we can see how the more emotional the content, the more attention it grabs, the more it cascades, the more chances of pushing a conspiratorial mindset to social media audiences. This becomes extremely salient when looking at the recent antivaxxers' trend of Holocaust trivialisation present in conspiracy narratives of NWO and Great Reset (Karakoulaki and Dessì, 2021).

As a matter of fact, one of the 6 tweets collected in the time frame of Citizen n. 3 shows a direct comparison of antivaxxers with the persecution of Jews, in the format of a screenshot of a telegram group's message called "TRUTH (in English) – truth sets you free", in the context of the Canadian truckers' Freedom Convoy and antagonization of Justin Trudeau's managing of the Covid-19 pandemic. Here many layers overlap: science denialism, self-victimisation, antisemitism, conspiratorial thinking of truth 'unveiling' and freedom.

Black

Topology

The last cluster is the smallest in terms of nodes (83) but the largest in terms of edges (299). It immediately stands out for its compactness as most nodes are connected to the main 4 central hubs. Modularity is significantly lower suggesting a community without impacting fractions. Relational data shows that this is because only 1 tweet has been shared therefore indicating a close

connection between the hubs in this sub-network. In this specific case, the relation between all nodes is due to Citizen n. 4's mentions to renown conspiracists and mis/disinformation superspreaders, whose identity cannot be disclosed here. The diversity of this network – a doctor, a politician, and a radio broadcast network – is indicative of the many drivers identified in the literature review. First, the presence of a far-right politician suggests the ideological leaning and the actors connected to the hashtag #DittaturaSanitaria. Second, the presence of a radio shows the meaning through which Twitter is not only used to mainstream fringe narratives, but also used as a gateway platform to redirect users to more radical and explicit content away from mainstream social media content moderation policies. Third, the presence of a doctor highlights how scientific beliefs are pivotal for antivaxxer's science denialism. Moreover, it shows how science is an effective catalyst for the presence of conspiratorial beliefs. Indeed, the next section will provide an in-detail content analysis of Doctor n. 1's tweets and show the extent to which this affirmation is true.

Topics

The tweet in question engages in a framing of mainstream media as “professional liars” in the context of a fact-checked misinformation regarding the Russo-Ukrainian War published by an authoritative Italian newspaper. Together with the sample hashtag, we can also find #RussiaUkraineConflict which is a relevant observation based on the literature previously assessed. Whereas the Covid-19 pandemic has relatively nothing to do with the Russo-Ukrainian War, the two are enmeshed together and mixed up in the evergreen conspiratorial belief that media cover the truth, therefore must be in cahoots with powerful forces planning to cover the truth from us. This reflects an epistemic need of our times to find easy explanations to complex situations in uncertain times.

Even more so, such need is reflected in two elements of this tweet: the date, the 25th of February which coincides with the day after the Russian invasion of

Ukraine and the presence of two major unrelated world events (Covid-19 and the war). Although it is beyond the scope of this research to investigate CTs in the context of the Russo-Ukrainian War, it is nonetheless important to denote the chain of equivalence in full swing in this cluster, held up by a convincing sequential narrative of the media being manipulated and manipulating us. More so, it shows how a monological belief system can be set in place in such a short period of time in order to exploit audiences' cognitive pitfalls and appease psychological needs in times of crisis. Indeed, a study conducted by Orłowski (2022) empirically shows the intersection of the Italian antivaxxer community with the Italian Putin-friendly 'Z-army', where the central hubs also coincide with some of the ones identified (but not disclosed) in this research.

Content Analysis

The picture painted by the findings and discussion of the SNA is a multi-layered one, which deals with psychological and emotional leverages exploited, topology and information diffusion patterns of Twitter and political partisanship of the Italian antivaxxer movement. The identification of central players allowed an understanding of the type of dissemination and the type of content, which led to the conclusion that the Covid-19 pandemic has indeed proved to be a fertile ground for conspiratorial thinking. The sample size for the content analysis was based on this study's understanding of the centrality science denialism has in the context of the Covid-19 pandemic and the online antivaxxer movement, an assumption by the literature review and then validated by the SNA's findings. Therefore, a doctor was selected and deemed most suited to validate a second assumption in line with the literature review: the Italian antivaxxer community contain veiled antisemitic narratives. Consequently, this next section will investigate whether both the literature and the SNA findings are matched by the content analysis of a key player of the Italian Twitter antivaxxer community. In particular, it will focus on the latent meaning of frames and narratives and discuss their antisemitic underpinnings.

Psychological needs and drivers of conspiratorial thinking

The content of the tweets contained what has been identified in the literature as psychological drivers for conspiratorial thinking in the literature. Epistemic needs were met by the doctor by the provision of easy, fast and efficient answers to a very complex crisis that is the Covid-19 pandemic. In particular the constant antagonization of powerful forces either profiting, controlling or subjugating the Italian population provided a clear explanatory framework for audiences to latch on and potentially appease their need to lower their uncertainty.

Existential needs, through the employment of emotional levers such as hostility, fear and victimhood, are accentuated with emotionally charged wording such as references to Satan and death. This has the potential to instil anxiety in their audience therefore driving them to conspiratorial thinking.

Lastly, social needs are also exploited in the form of out-group antagonism and in-group sense of victimhood and narcissism. For instance, the doctor admonishes regular doctors of being veterinarians and incompetent in order to boost their sense of worth and instil trustworthiness in their regards to their audience. Another example is the comparison of antivaxxers (themselves included) as victims of a powerful system, likened to Nazi Germany and associating their perceived suffering to the ones of persecuted Jews.

As all the psychological needs are present and exploited in the doctor's tweets, it is expected to find a high presence of conspiratorial thinking in the content of their tweets. In addition to psychological needs exploited by this specific actor, antecedents of belief in Covid-19 CTs were found to be science denialism, political drivers and conspiracy thinking (Uscinski *et al.*, 2020; Douglas, 2021). Science denialism was expectedly present in the sample analysed as the doctor primarily engaged in framing the health measures of the Covid-19 to be dangerous, deadly and designed to control people. This reflects the assumption that science denialism forms an epistemological hinge for conspiracy thinking,

as for instance showed by a tweet in which they suggest to ‘follow the money’ to understand vaccines and the Great Reset.

Political motivators included distrust in the Italian government and the establishment, as for instance expressed in the demonisation of Italian prime minister Draghi and financial institutions such as the WEF. Moreover, conservative values which are incident to conspiracy thinking are present in the sample. Specifically, science denialism itself, the demonisation of the ‘Deep State’ and the aversion of technological and scientific advancement are all elements found in the literature review to be incident to belief in CTs.

Finally, conspiracy thinking here intended as “the tendency to view major political events as the product of conspiracies” (Uscinski *et al.*, 2020, p. 1), was prominent in almost the entirety of the sample. Although this finding might seem obvious, it is essential to reiterate that these were found to be the drivers leading people to believe in Covid-19-specific CTs. As a matter of fact, the expectation of finding Covid-19 CTs is shown by the direct references to NWO and GR CTs.

Furthermore, the content analysis allowed to identify two additional potential drivers to belief in Covid-19 CTs: scientific reasoning and Christian orthodox values.

In this sample, scientific reasoning was found to be an epistemological tool for the conspiracy belief that pharmaceutical companies were secretly attempting to control world events. Although this resonates with the literature which argues that science denialism is an epistemological hinge for conspiratorial thinking, these findings show that scientific trust is a better predictor of conspiratorial thinking in the Italian context of the Covid-19 pandemic. This conclusion is also supported by the premises of the post-truth era, in which social trust of online users prevails on fact-checked information by official information channels. More so, it intersects with the findings of the utility of SNA in identifying authoritative central hubs to effectively locate the source of misinformation and conspiratorial cybercascades. In the case of the

doctor, social trust in the form of scientific authority allows their audience to potentially absorb the latent antisemitic underpinning of their tweets, appeasing their existential need of scapegoating an antagonistic other for any major social or political event.

Lastly, the presence of Christian motives and more so Christian orthodox ones, suggest that these elements could also represent a driver and/or a pull factor for the belief of Covid-19 CTs in the context of Italian antivaxxer community. For instance, a specific us vs them frame, typical of CTs and Covid-19 CTs specifically, was found in the form of demonisation of an ‘Antagonistic Other’ as satanic and the appraisal of resistance to such devilish enemies in the form of Orthodox Christianity.

The emotional appeal of NWO and GR

As investigated in the literature review and observed in the SNA discussion, much of the appeal of CTs is their emotional content. This is a defining aspect of the post-truth era and vital for the formation of echo-chambers, polarisation and consequential to the spread of mis/disinformation. The sample analysed help put in context the societal and technological drivers of belief in CTs as leveraging emotions was found to be the major pattern into the division of coding categories. The doctor’s potential emotional exploitation of cognitive pitfalls and psychological needs of online users make it possible for CTs such as the NWO and GR to go unchecked and unvalidated, coated with a sense of social trust as inferred by their ranking in the SNA analysis. This allows for the cybercascade of dangerous antisemitic narratives through the avoidance of content moderation policies with the use of dog-whistles, in what constitutes an historical moment of ‘veiled antisemitism’, or as the Head of Policy and Research of the Institute of Strategic Dialogue puts it, “greater pickup and purchase of antisemitic narratives in the mainstream than has historically been the case” (in Rose, 2021, p. 9). The commodity for such purchase was found to be emotional levers, which the next paragraphs will delve into.

Hostility

In the sample analysed, the othering of an antagonistic other took many names and forms but can be condensed to what will be hereafter referred to as the *élite*. Indeed, the identification of the existential threat by the doctor included generic words such as *globalists* and *élite*, or specific entities and individuals such as the WEF, the Deep State, Pfizer Group or Italian PM Mario Draghi. The vast variety of enemies identified allows the potential antivaxxer reader to associate their discontent over Covid-19 health measures to groups of people and/or organisations that are deemed responsible – and thus the architects – of their perceived subjugation. This allows for the convergence of many conspiracy frames in what constitutes a monological belief system that centres on hostility towards what is just apparently defined as Elite and appease the epistemic need to find an easy answer to a complex threat environment. The NWO and GR CTs in this sense provide a working chain of equivalence in which hostile actors fit perfectly with the framing of the pandemic by the doctor. This reinforces the evergreen foundation of conspiracy narratives, the “us versus them”, whereas “them” ends up being an ever-expanding categories of either culprits, collaborators or satanists. To this end, antisemitic dog-whistles such as NWO, Davos, Satanist, Elite, Globalists, Mainstream Media and WEF serve the purpose of veiling antisemitism whether consciously or unconsciously. In this way, the doctor is able to activate antisemitic tropes with a strong degree of *plausible deniability*: jews control the media and finance, embody or are connected to the Antichrist, and more generally control the world and its global events. Finally, by demonizing a perceived enemy and fuelling hate and fear, the identification of a hostile identity becomes pivotal into leveraging old antisemitic tropes and mainstreaming far-right ideology.

Fear

Anxiety, and more broadly fear, has been recognised as an important driver to conspiratorial thinking. To this end, CTs become useful tools to appease the existential need to identify the threat which menace the ontological security of the self and of the group. Fear is instrumental in the frames used by the doctor, as can be seen by the employment of conspiratorial elements of transhumanism, satanism and authoritarianism. References to more established CTs such as the NWO and GR provide a binding force to the variety of elements listed thus foretelling the underlying antisemitic themes and narratives behind these. For example, the analysis showed how technophobia – expressed through frames of fear of transhumanism, microchips and brain control – is a core tenet of the Great Reset theory, which is either referred explicitly or implicitly with references to WEF and Davos. The decoded antisemitic narrative in this example is the one of Jewish Elite’s plan to control the population by turning them into cyborgs to be subservient to the elite (Anti-Defamation League, 2020). In this case, fear plays a crucial role in framing the Covid-19 pandemic as a secret plot by Elite to control the world population, which is dog-whistling to the old antisemitic narrative of the *Protocols*. Fear is then exploited to drive users to believe in NWO and GR reset theory, in increasing people’s existential need to restore their perceived threatened sense of security and control.

Victimhood

The last emotional lever exploited for the dissemination of frames that serve as links to the NWO and GR chains of equivalence is victimhood. This was expressed through the references to mainstream media disinforming individuals and frame antivaxxers as the enemy, pharmaceutical companies censoring the ‘true’ science behind Covid-19 and vaccines, and comparison between antivaxxers and the Jews persecuted under Nazi Germany by means of a ‘Nazi health dictatorship’. Again, NWO and GR serve as oiled up chains of equivalence. Antisemitic narratives are again underlying in the recorded

examples, as media control and big pharma's censorship are not only sequential frames in NWO and GR theories, but also core tenets of the *Protocols*. Lastly, even if contradictory at first glance, holocaust comparisons also show the antisemitic substructure of this particular example, as the comparison of antivaxxers' perceived persecution to the one experienced by Jews in the Holocaust, which in this way is distorted and trivialised. Even more so, it offers a way for the antivaxxer movement to 'whitewash' the group from antisemitism, as stated by Bini Guttman (2021), the president of the European Union of Jewish Students.

Conclusion

This study set out to investigate the structure and the presence of conspiratorial antisemitic narratives in a sample of the Italian antivaxxer community on Twitter. To do so, it employed two methods: SNA and a qualitative content analysis which brought about two different but complementary set of findings. The social network analysis allowed to perform a Twitter search network of the hashtag #DittaturaSanitaria, which led to the investigation of the overall social network and its mesoscopic structure. The SNA resulting from it aimed at uncovering the networked structure of conspiratorial veiled antisemitism expressed in the form of the *health dictatorship* framing of the sample hashtag. Firstly, prominent far-right politicians were found to be interacting with the hashtag, and one specifically directly engaged with it by using conspiratorial language and dog-whistles commonly associated to the NWO and GR theories, notorious for their antisemitic underpinnings. This showed the normalisation and institutionalisation of conspiracy thinking through the leveraging of science denialism and distrust of government, and their power to mainstream their antisemitic foundations.

Secondly, SNA was also pivotal in understanding what type of content is shared and by what type of actor. Specifically, community gatekeepers were identified as responsible of representing the more presentable elements of this conspiratorial community, which are science denialism and lack of trust in the Italian government. As science denialism and anti-establishment beliefs are epistemological hinges to conspiracy thinking, this finding reflected the historical interconnectedness of anti-scientific conspiracy beliefs and antisemitism.

Thirdly, the sample network contained less *veiled* framings of the *health dictatorship*, with more accentuation on conspiratorial thinking and antisemitic elements. For example, SNA and graph visualisation helped to uncover a coordinated online action carried out by a renowned conspiracy movement in Italy against Italian local newspapers. In particular, their use of references to

Nazi Germany to the alleged *health dictatorship* was found to be a recurring theme in the overall network and the most mainstreamed antisemitic trait of the sample network: holocaust trivialisation.

The last finding derived from the SNA is the presence of the sample hashtag in relation to a relatively disconnected novel topic at the time of collection: the Russian invasion of Ukraine. In this case, the Covid-19 pandemic and the conflict in question were linked by the claim that mainstream media is controlled and manipulated by ‘professional liars’ with the intention of disinforming people. This is a relevant finding as it showed a chain of equivalence in which a sequential narrative is held up by the demonisation of a perceived threat: the media. Crucially, control of media is an evergreen antisemitic narrative that, forms the underlying assumption of such claim. It follows that antisemitic narratives provide an epistemological framework for unconnected events to be linked in a chain of equivalence.

The second part of the analysis involved a qualitative content analysis set to categorise the latent antisemitic narratives behind the messages of a key actor identified in the SNA.

In the sample of tweets analysed, the conspiracy theorist appeased what were identified in the literature as psychological needs leading people to believe in CTs. In particular, the identification of an antagonistic Other proved to be the constant in their tweets and deemed as the basic unit of observation for the coding process. The different appellations and adjectives used to describe the Other were either explicit references to CTs NWO and GR or words associated with these CTs. The analysis found that the employment of dog-whistles and generic words purported a form of veiled antisemitism, which unveiling required the examination of identified coded words and their underlying meanings. Tweets were then categorised based on the type of emotional level used. Hostility, fear and victimhood were found to be determining characteristics for the framing of the Covid-19 pandemic and thus the emotional appeal of the conspiracy theorist’s tweets. This process resulted in the

association of the main frames used by the doctor to renown antisemitic tropes and/or narratives. Hostility was associated the most with the idea that Jews are profiting from the pandemic because of their financial power. Fear was associated with the idea that Jews are the source of the pandemic as they have control and power over world events. Lastly, victimhood was associated with the idea that antivaxxers are being persecuted as Jews were under Nazi Germany, in what constitutes an antisemitic Holocaust trivialisation.

Another relevant finding from the sample analysed is the chain of equivalence put in place by the selected key player. In particular, the links of the chains consisted in many different frames of the Covid-19 pandemic which touched upon a vast selection of different types of institutions: financial, political, religious, social, technological and medical. They were all believed to be part of the same sequential narratives of the NWO and GR theory, which most visible antisemitic reference was indeed the suggestion that the coordination of all these institutions were under the control of a specific group of people and that in order to uncover the truth all we have to do is to “follow the money”. Conclusively, the analysis found that, if we were to metaphorically imagine a bike’s roller chain of equivalence for the sample analysed, antisemitic conspiratorial thinking is then the lubricant that keeps all links together and the wheel of CTs spinning.

Together, these findings paint a worrisome picture for the spread of antisemitism online. The social, political and technological context make it possible for mis/disinformation and CTs to uncontrollably cascade into users that might, for one reason or another, just assume it to be true without any further validation. The emotional appeal of CTs in general, and the resilience they have shown for instance in the advent of a new shifting geopolitical moment as with the Russian invasion of Ukraine, make this kind of research more relevant. Social network analysis has allowed the identification of different types of content diffusion, what kind of content is shared by what type of social actor and more importantly who the central players of conspiratorial networks are. To

be able to do so allows a deeper understanding of extremism, as is the case with this study's unveiling of antisemitism. Particularly, the analysis of the mesoscopic structures of networks through community detection algorithms can facilitate the identification of relevant actors and communities and see the networked structure of conspiracy beliefs. Graph visualization is equally important as it allows for the identification of conspiratorial hubs and diffusion patterns that might otherwise be lost within large datasets. Furthermore, research on antisemitism on mainstream social media might benefit from a twitter search network based on relatively innocuous hashtags as was the case with the study. Through this approach, it is possible to determine what the structure and language of online antisemitism has in its concealed and more normalised form. The mixed approach method was then essential to assess the extent of the presence of underlying antisemitic narratives in what only looked like as anti-scientific antivaxxers' content. The research of latent meanings of dog-whistles should be encouraged as a way to go beyond quantitative studies on the prevalence of overt antisemitism and their intrinsic limitations due to content moderation policies on mainstream social media. Thus, this study expands on previous efforts at uncovering hidden antisemitism such as the American Jewish Committee's (2021c) "The Translate Hate Glossary", Get The Trolls Out!'s (2022) "Linguistic self-defence guide against antisemitism" and Hope Not Hate's (2021) glossary of online antisemitic language. As with this research, future academic efforts on the link between antisemitism and CTs should first focus on their networked structure and secondly, at the rhetorical mechanisms employed by central actors in order to understand patterns of diffusion of dangerous antisemitic narratives.

In conclusion, Jean Paul Sartre's (1995) words concisely summarise the relevance and scope of this research: "anti-Semitic opinion appears to be a molecule that can enter into combination with other molecules of any origin without undergoing any alteration" (p. 4-5). This is exactly the mechanism through which veiled antisemitism operates, and the reason why many people

might never associate the use of the *Nazi health dictatorship* to antisemitism, unless, of course, its underlying structure gets *unveiled*.

Bibliography

Alamsyah, A., Sarniem, B.C., and Indrawati (2017) 'Direct comparison method of information dissemination using legacy and Social Network Analysis', in *2017 3rd International Conference on Science and Technology - Computer (ICST)*. Yogyakarta, Indonesia: IEEE, pp. 153–158. Available at: <https://doi.org/10.1109/ICSTC.2017.8011870>.

Alhaji, R. and Rokne, J. (eds) (2018) *Encyclopedia of Social Network Analysis and Mining*. New York, NY: Springer New York. Available at: <https://doi.org/10.1007/978-1-4939-7131-2>.

Allington, D. *et al.* (2021) 'Health-protective behaviour, social media usage and conspiracy belief during the COVID-19 public health emergency', *Psychological Medicine*, 51(10), pp. 1763–1769. Available at: <https://doi.org/10.1017/S003329172000224X>.

Amadeu Antonio Foundation, Expo Foundation and HOPE not hate (2021) *Antisemitism in the Digital Age: Online Antisemitic Hate, Holocaust Denial, Conspiracy Ideologies and Terrorism in Europe*.

American Jewish Committee (2021a) *Jewish communist* | #TranslateHate | AJC. Available at: <https://www.ajc.org/translatehate/Jewish-communist> (Accessed: 24 July 2022).

American Jewish Committee (2021b) *Protocols of the Elders of Zion* | #TranslateHate | AJC. Available at: <https://www.ajc.org/translatehate/Protocols-of-the-Elders-of-Zion> (Accessed: 24 July 2022).

American Jewish Committee (2021c) #TranslateHate - *Stopping Antisemitism Starts with Understanding It*. Available at: https://www.ajc.org/sites/default/files/pdf/2021-10/AJC_TranslateHate-Glossary-October2021.pdf.

And, M.K. and Sedek, G. (2005) 'Conspiracy Stereotypes of Jews During Systemic Transformation in Poland', *International Journal of Sociology*, 35(1), pp. 40–64. Available at: <https://doi.org/10.1080/00207659.2005.11043142>.

Anti-Defamation League (2020) "'The Great Reset' Conspiracy Flourishes Amid Continued Pandemic', 29 December. Available at: <https://www.adl.org/resources/blog/great-reset-conspiracy-flourishes-amid-continued-pandemic> (Accessed: 9 July 2022).

Anti-Defamation League (2022a) *Antisemitic Conspiracy Theories Abound Around Russian Assault on Ukraine* | ADL, Anti-Defamation League. Available at: <https://www.adl.org/resources/blog/antisemitic-conspiracy-theories-abound-around-russian-assault-ukraine> (Accessed: 24 July 2022).

Anti-Defamation League (2022b) ‘Antisemitism Uncovered: Myth – Jews Are Greedy’, *Antisemitism Uncovered*. Available at: <https://antisemitism.adl.org/greed/> (Accessed: 24 July 2022).

Aukes, E.J., Bontje, L.E. and Slinger, J.H. (2020) ‘Narrative and Frame Analysis: Disentangling and Refining Two Close Relatives by Means of a Large Infrastructural Technology Case’, *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, Vol 21, p. No 2 (2020): Challenging Times— Qualitative Methods and Methodological Approaches to Research on Time. Available at: <https://doi.org/10.17169/FQS-21.2.3422>.

Berger, J.M. (2018) *Extremism*. Cambridge, MA: The MIT Press (The MIT press essential knowledge series).

Bertin, P., Nera, K. and Delouvé, S. (2020) ‘Conspiracy Beliefs, Rejection of Vaccination, and Support for hydroxychloroquine: A Conceptual Replication-Extension in the COVID-19 Pandemic Context’, *Frontiers in Psychology*, 11. Available at: <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.565128> (Accessed: 16 July 2022).

Betz, H.-G. (2021) ‘Beware! Populism in Conjunction with Conspiracy Theories Might be Bad for Your Health (Part 2) – Centre for Analysis of the Radical Right’, *Centre for Analysis of the Radical Right*, 2 February. Available at: <https://www.radicalrightanalysis.com/2021/02/02/beware-populism-in-conjunction-with-conspiracy-theories-might-be-bad-for-your-health-part-2/> (Accessed: 30 November 2021).

Biddlestone, M. *et al.* (2021) ‘Conspiracy Theories and Intergroup Relations’, in *Routledge Handbook of Conspiracy Theories*. Routledge.

Bilek, J. (2018) *Who Are the Rich, White Men Institutionalizing Transgender Ideology?*, *The Federalist*. Available at: <https://thefederalist.com/2018/02/20/rich-white-men-institutionalizing-transgender-ideology/> (Accessed: 24 July 2022).

Bogel-Burroughs, N. (2020) ‘Antivaccination Activists Are Growing Force at Virus Protests’, *The New York Times*, 3 May. Available at: <https://www.nytimes.com/2020/05/02/us/anti-vaxxers-coronavirus-protests.html> (Accessed: 1 December 2021).

Bruns, A., Harrington, S. and Hurcombe, E. (2020) “‘Corona? 5G? or both?’: the dynamics of COVID-19/5G conspiracy theories on Facebook”, *Media International Australia*, 177(1), pp. 12–29. Available at: <https://doi.org/10.1177/1329878X20946113>.

Butter, M. and Knight, P. (eds) (2021) *Routledge handbook of conspiracy theories*. First issued in paperback. London New York: Routledge, Taylor & Francis Group (Routledge handbooks). Available at: <https://doi.org/10.4324/9780429452734>.

Carney, D.R. *et al.* (2008) ‘The Secret Lives of Liberals and Conservatives: Personality Profiles, Interaction Styles, and the Things They Leave Behind: Liberals and Conservatives’, *Political Psychology*, 29(6), pp. 807–840. Available at: <https://doi.org/10.1111/j.1467-9221.2008.00668.x>.

Caverlee, J., Liu, L. and Webb, S. (2008) ‘Socialtrust: tamper-resilient trust establishment in online communities’, in *Proceedings of the 8th ACM/IEEE-CS joint conference on Digital libraries - JCDL '08*. Pittsburgh PA, PA, USA: ACM Press, p. 104. Available at: <https://doi.org/10.1145/1378889.1378908>.

Čavojová, V., Šrol, J. and Ballová Mikušková, E. (2022) ‘How scientific reasoning correlates with health-related beliefs and behaviors during the COVID-19 pandemic?’, *Journal of Health Psychology*, 27(3), pp. 534–547. Available at: <https://doi.org/10.1177/1359105320962266>.

Cichočka, A. *et al.* (2016) “‘They will not control us’”: Ingroup positivity and belief in intergroup conspiracies’, *British Journal of Psychology*, 107(3), pp. 556–576. Available at: <https://doi.org/10.1111/bjop.12158>.

Community Security Trust (2022) *Covid, Conspiracies & Jew-Hate - Antisemitism in the Covid-19 conspiracy movement*. Community Security Trust. Available at: <https://cst.org.uk/public/data/file/0/9/Antisemitism%20in%20the%20Covid%20Conspiracy%20Movement.pdf> (Accessed: 19 July 2022).

Crawford, B. (2020) *Coronavirus and conspiracies: how the far right is exploiting the pandemic*, *The Conversation*. Available at: <http://theconversation.com/coronavirus-and-conspiracies-how-the-far-right-is-exploiting-the-pandemic-145968> (Accessed: 29 November 2021).

DataReportal (2022) *Global Social Media Statistics*, *DataReportal – Global Digital Insights*. Available at: <https://datareportal.com/social-media-users> (Accessed: 11 May 2022).

De Coninck, D. *et al.* (2021) ‘Beliefs in Conspiracy Theories and Misinformation About COVID-19: Comparative Perspectives on the Role of

Anxiety, Depression and Exposure to and Trust in Information Sources’, *Frontiers in Psychology*, 12. Available at: <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.646394>.

Di Noto, A. and Puente, D. (2022) *La teoria del complotto antisemita su Zelensky e il tridente ucraino di origini ebraiche*, *Open*. Available at: <https://www.open.online/2022/05/07/zelensky-tridente-ucraino-teoria-del-complotto-antisemitismo/> (Accessed: 24 July 2022).

Douglas, K.M. (2021) ‘COVID-19 conspiracy theories’, *Group Processes & Intergroup Relations*, 24(2), pp. 270–275. Available at: <https://doi.org/10.1177/1368430220982068>.

Douglas, K.M., Sutton, R.M. and Cichocka, A. (2017) ‘The Psychology of Conspiracy Theories’, *Current Directions in Psychological Science*, 26(6), pp. 538–542. Available at: <https://doi.org/10.1177/0963721417718261>.

Earnshaw, V.A. *et al.* (2020) ‘COVID-19 conspiracy beliefs, health behaviors, and policy support’, *Translational Behavioral Medicine*, 10(4), pp. 850–856. Available at: <https://doi.org/10.1093/tbm/ibaa090>.

Easley, D. and Kleinberg, J. (2010) *Networks, crowds, and markets: reasoning about a highly connected world*. New York: Cambridge University Press.

Eberl, J.-M., Huber, R.A. and Greussing, E. (2021) ‘From populism to the “pandemic”: why populists believe in COVID-19 conspiracies’, *Journal of Elections, Public Opinion and Parties*, 31(sup1), pp. 272–284. Available at: <https://doi.org/10.1080/17457289.2021.1924730>.

EEAS (2020) *Covid-19 Disinformation*. European External Action Service. Available at: <https://euvsdisinfo.eu/eeas-special-report-update-short-assessment-of-narratives-and-disinformation-around-the-covid-19-pandemic-update-may-november/#>.

European Commission Directorate General for Justice and Consumers and Institute for Strategic Dialogue (2021) *The rise of antisemitism online during the pandemic: a study of French and German content*. LU: Publications Office. Available at: <https://data.europa.eu/doi/10.2838/671381> (Accessed: 7 July 2022).

Fitzgerald, J. (2022) ‘Conspiracy, anxiety, ontology: Theorising QAnon’, *First Monday* [Preprint]. Available at: <https://doi.org/10.5210/fm.v27i5.12618>.

Francia, M., Gallinucci, E. and Golfarelli, M. (2019) ‘Social BI to understand the debate on vaccines on the Web and social media: unraveling the anti-, free,

and pro-vax communities in Italy’, *Social Network Analysis and Mining*, 9(1), p. 46. Available at: <https://doi.org/10.1007/s13278-019-0590-x>.

Future Learn (2017) *Network Components and the Giant Component*, *FutureLearn*. Available at: <https://www.futurelearn.com/info/blog> (Accessed: 10 July 2022).

Gleicher, N. (2021) ‘Meta’s Adversarial Threat Report’, *Meta*, 1 December. Available at: <https://about.fb.com/news/2021/12/metad-adversarial-threat-report/> (Accessed: 18 January 2022).

Gobo, G. and Sena, B. (2019) ‘Oltre la polarizzazione “pro-vax” versus “no-vax”. Atteggiamenti e motivazioni nel dibattito italiano sulle vacciNazioni’, *SALUTE E SOCIETÀ*, (2), pp. 176–190. Available at: <https://doi.org/10.3280/SES2019-002014>.

Grinberg, N. *et al.* (2019) ‘Fake news on Twitter during the 2016 U.S. presidential election’, *Science*, 363(6425), pp. 374–378. Available at: <https://doi.org/10.1126/science.aau2706>.

Grossman, M. (2021) *How Has COVID-19 Changed The Violent Extremist Landscape?*, *Centre for Research and Evidence on Security Threats*. Available at: <https://crestresearch.ac.uk/comment/how-has-covid-19-changed-the-violent-extremist-landscape/> (Accessed: 1 December 2021).

Grzesiak-Feldman, M. (2007) ‘Conspiracy thinking and state-trait anxiety in young Polish adults’, *Psychological Reports*, 100(1), pp. 199–202. Available at: <https://doi.org/10.2466/pr0.100.1.199-202>.

Grzesiak-Feldman, M. (2013) ‘The Effect of High-Anxiety Situations on Conspiracy Thinking’, *Current Psychology*, 32(1), pp. 100–118. Available at: <https://doi.org/10.1007/s12144-013-9165-6>.

Gualda, E. and Rúas-Araújo, J. (2019) ‘Conspiracy theories, credibility and trust in information’, *Communication & Society*, 32(1). Available at: <https://doi.org/10.15581/003.32.1.179-195>.

Guess, A. *et al.* (2021) ‘Cracking Open the News Feed: Exploring What U.S. Facebook Users See and Share with Large-Scale Platform Data’, *Journal of Quantitative Description: Digital Media*, 1. Available at: <https://doi.org/10.51685/jqd.2021.006>.

Guess, A., Nagler, J. and Tucker, J. (2019) ‘Less than you think: Prevalence and predictors of fake news dissemination on Facebook’, *Science Advances*, 5(1). Available at: <https://doi.org/10.1126/sciadv.aau4586>.

- Guetta, B., Gatti, S. and Cambuzzi, M.H. (2022) *Relazione annuale sull'antisemitismo in Italia: 2021*. Fondazione Centro di Documentazione Ebraica Contemporanea - Osservatorio antisemitismo. Available at: https://www.cdec.it/wp-content/uploads/2022/01/RELAZINEANNUALE_2021_STAMPA.pdf.
- Guttman, B. (2021) *An explosion of antisemitism in Europe, The Times of Israel*. Available at: <https://blogs.timesofisrael.com/an-explosion-of-antisemitism-in-europe/> (Accessed: 21 July 2022).
- H. Fakhurroja *et al.* (2019) 'Crisis Communication on Twitter: A Social Network Analysis of Christchurch Terrorist Attack in 2019', in *2019 International Conference on ICT for Smart Society (ICISS)*, pp. 1–6. Available at: <https://doi.org/10.1109/ICISS48059.2019.8969839>.
- Hagen, L. *et al.* (2018) 'Crisis Communications in the Age of Social Media: A Network Analysis of Zika-Related Tweets', *Social Science Computer Review*, 36(5), pp. 523–541. Available at: <https://doi.org/10.1177/0894439317721985>.
- Hansen, D.L., Schneiderman, B. and Smith, M.A. (2020) *Analyzing social media networks with NodeXL: insights from a connected world*. Second edition. Amsterdam: Morgan Kaufmann.
- Henderson, A. (2019) 'George Soros Targeted By Anti-Semitic Meme That Predates The Nazis – Centre for Analysis of the Radical Right', *Centre for Analysis of the Radical Right*, 29 May. Available at: <https://www.radicalrightanalysis.com/2019/04/29/george-soros-targeted-by-anti-semitic-meme-that-predates-the-nazis/> (Accessed: 24 July 2022).
- Hsieh, H.-F. and Shannon, S.E. (2005) 'Three Approaches to Qualitative Content Analysis', *Qualitative Health Research*, 15(9), pp. 1277–1288. Available at: <https://doi.org/10.1177/1049732305276687>.
- Huszár, F. *et al.* (2022) 'Algorithmic amplification of politics on Twitter', *Proceedings of the National Academy of Sciences*, 119(1), p. e2025334119. Available at: <https://doi.org/10.1073/pnas.2025334119>.
- Imhoff, R. and Bruder, M. (2014) 'Speaking (Un-)Truth to Power: Conspiracy Mentality as A Generalised Political Attitude', *European Journal of Personality*, 28(1), pp. 25–43. Available at: <https://doi.org/10.1002/per.1930>.
- Institute for Strategic Dialogue (2020) *Far-Right exploitation of Covid-19*. 3. London: Institute for Strategic Dialogue. Available at: <https://www.isdglobal.org/wp-content/uploads/2020/05/20200513-ISDG-Weekly-Briefing-3b.pdf> (Accessed: 2 March 2022).

- Institute for Strategic Dialogue and B'nai B'rith International (2022) *Online Antisemitism: A Toolkit for Civil Society*. London: Institute for Strategic Dialogue. Available at: <https://www.isdglobal.org/wp-content/uploads/2022/04/Anti-Semitism-Online-Guide-ISD.pdf>.
- Jenkins, H., Ford, S. and Green, J. (2013) *Spreadable media: creating value and meaning in a networked culture*. New York ; London: New York University Press (Postmillennial pop).
- Jost, J.T. and Krochik, M. (2014) 'Ideological Differences in Epistemic Motivation: Implications for Attitude Structure, Depth of Information Processing, Susceptibility to Persuasion, and Stereotyping', in *Advances in Motivation Science*. Elsevier, pp. 181–231. Available at: <https://doi.org/10.1016/bs.adms.2014.08.005>.
- Karakoulaki, M. and Dessì, G. (2021) *Antisemitism and anti-vax discourse in Europe*. Media Diversity Institute, p. 58.
- Kennedy, J. (2019) 'Populist politics and vaccine hesitancy in Western Europe: an analysis of national-level data', *European Journal of Public Health*, 29(3), pp. 512–516. Available at: <https://doi.org/10.1093/eurpub/ckz004>.
- Khaing Phyo, W. (2015) 'Analysing Social Network using Gephi', in. University of Computer Studies Yangon. Available at: <http://onlineresource.ucsy.edu.mm/handle/123456789/114>.
- Kim, S.-Y. *et al.* (2021) 'The Effects of Marine Algal Polyphenols, Phlorotannins, on Skeletal Muscle Growth in C2C12 Muscle Cells via Smad and IGF-1 Signaling Pathways', *Marine Drugs*, 19(5). Available at: <https://doi.org/10.3390/md19050266>.
- Kinnvall, C. and Mitzen, J. (2020) 'Anxiety, fear, and ontological security in world politics', *International Theory*, 12(2), pp. 238–239. Available at: <https://doi.org/10.1017/S1752971920000159>.
- Kleinheksel, A.J. *et al.* (2020) 'Demystifying Content Analysis', *American Journal of Pharmaceutical Education*, 84(1), p. 7113. Available at: <https://doi.org/10.5688/ajpe7113>.
- Klofstad, C.A. *et al.* (2019) 'What drives people to believe in Zika conspiracy theories?', *Palgrave Communications*, 5(1), p. 36. Available at: <https://doi.org/10.1057/s41599-019-0243-8>.

Kruglanski, A.W. *et al.* (2020) ‘Terrorism in time of the pandemic: exploiting mayhem’, *Global Security: Health, Science and Policy*, 5(1), pp. 121–132. Available at: <https://doi.org/10.1080/23779497.2020.1832903>.

Kruglanski, A.W., Molinario, E. and Lemay, E.P. (2021) ‘Coping with COVID-19-induced threats to self’, *Group Processes & Intergroup Relations*, 24(2), pp. 284–289. Available at: <https://doi.org/10.1177/1368430220982074>.

Kuypers, J.A. (ed.) (2009) *Rhetorical criticism: perspectives in action*. Lanham, MD: Lexington Books (Lexington studies in political communication).

Laclau, E. and Mouffe, C. (2001) *Hegemony and socialist strategy: towards a radical democratic politics*. 2nd ed. London ; New York: Verso.

Leal, H. (2021a) ‘Networked Disinformation and the Lifecycle of Online Conspiracy Theories’, in *Routledge handbook of conspiracy theories*. First issued in paperback. London New York: Routledge, Taylor & Francis Group (Routledge handbooks), pp. 483–496. Available at: <https://doi.org/10.4324/9780429452734>.

Leal, H. (2021) ‘Networked Disinformation and the Lifecycle of Online Conspiracy Theories’, in M. Butter and P. Knight (eds) *Routledge handbook of conspiracy theories*. First issued in paperback. London New York: Routledge, Taylor & Francis Group (Routledge handbooks), pp. 497–511. Available at: <https://doi.org/10.4324/9780429452734>.

Loadenthal, D.M. (2021) ‘Anti-5G, Infrastructure Sabotage, and COVID-19’, *GNET*, 19 January. Available at: <https://gnet-research.org/2021/01/19/anti-5g-infrastructure-sabotage-and-covid-19/> (Accessed: 30 November 2021).

Lovari, A., Martino, V. and Righetti, N. (2021) ‘Blurred Shots: Investigating the Information Crisis Around Vaccination in Italy’, *American Behavioral Scientist*, 65(2), pp. 351–370. Available at: <https://doi.org/10.1177/0002764220910245>.

Marchal, N. and Au, H. (2020) ‘“Coronavirus EXPLAINED”: YouTube, COVID-19, and the Socio-Technical Mediation of Expertise’, *Social Media + Society*, 6(3), p. 2056305120948158. Available at: <https://doi.org/10.1177/2056305120948158>.

Marcus, K.L. (2015) *Fact Sheet on the Elements of Anti-Semitic Discourse*. The Louis D. Brandeis Center for Human Rights Under Law, p. 4.

Mason, S. and Singh, L. (2022) ‘Reporting and discoverability of “Tweets” quoted in published scholarship: current practice and ethical implications’,

Research Ethics, 18(2), pp. 93–113. Available at:
<https://doi.org/10.1177/17470161221076948>.

McNeil-Willson, R. (2020) *Framing in times of crisis: Responses to COVID-19 amongst Far Right Movements and Organisations*. International Centre for Counter-Terrorism. Available at: <http://www.jstor.org/stable/resrep25256> (Accessed: 18 May 2022).

Media Diversity Institute (2021) *Antisemitism and anti-vax discourse in Europe*. Available at: https://www.media-diversity.org/wp-content/uploads/2021/12/Antisemitism-and-anti-vax-discourse-in-Europe_MDI_GTTO.pdf.

Miller, J.M. (2020) ‘Do COVID-19 Conspiracy Theory Beliefs Form a Monological Belief System?’, *Canadian Journal of Political Science*, 53(2), pp. 319–326. Available at: <https://doi.org/10.1017/S0008423920000517>.

Miller, J.M., Saunders, K.L. and Farhart, C.E. (2016) ‘Conspiracy Endorsement as Motivated Reasoning: The Moderating Roles of Political Knowledge and Trust’, *American Journal of Political Science*, 60(4), pp. 824–844. Available at: <https://doi.org/10.1111/ajps.12234>.

Min, S.J. (2021) ‘Who Believes in Conspiracy Theories? Network Diversity, Political Discussion, and Conservative Conspiracy Theories on Social Media’, *American Politics Research*, 49(5), pp. 415–427. Available at: <https://doi.org/10.1177/1532673X211013526>.

Moonshot (2019) *Report: Anti-vax Online: Analysis of vaccine-related disinformation in Washington State*, Moonshot. Available at: <https://moonshotteam.com/anti-vax-online/> (Accessed: 30 November 2021).

van Mulukom, V. (2020) *Engagement in COVID-19 protective behaviours: A complex interaction of trust and information in twelve countries*. preprint. PsyArXiv. Available at: <https://doi.org/10.31234/osf.io/chy4b>.

van Mulukom, V. *et al.* (2022) ‘Antecedents and consequences of COVID-19 conspiracy beliefs: A systematic review’, *Social Science & Medicine*, 301, p. 114912. Available at: <https://doi.org/10.1016/j.socscimed.2022.114912>.

Musial, K. (2018a) ‘Research Designs for Social Network Analysis’, in R. Alhaji and J. Rokne (eds) *Encyclopedia of Social Network Analysis and Mining*. New York, NY: Springer New York, pp. 2232–2239. Available at: https://doi.org/10.1007/978-1-4939-7131-2_246.

- Musto, C. *et al.* (2015) ‘CrowdPulse: A framework for real-time semantic analysis of social streams’, *Information Systems*, 54, pp. 127–146. Available at: <https://doi.org/10.1016/j.is.2015.06.007>.
- Mutanga, M.B. and Abayomi, A. (2022) ‘Tweeting on COVID-19 pandemic in South Africa: LDA-based topic modelling approach’, *African Journal of Science, Technology, Innovation and Development*, 14(1), pp. 163–172. Available at: <https://doi.org/10.1080/20421338.2020.1817262>.
- Nelson, T.E., Oxley, Z.M. and Clawson, R.A. (1997) ‘Toward a Psychology of Framing Effects’, *Political Behavior*, 19(3), pp. 221–246. Available at: <https://doi.org/10.1023/A:1024834831093>.
- Newhagen, J.E. and Bucy, E.P. (2020) ‘Overcoming resistance to COVID-19 vaccine adoption: How affective dispositions shape views of science and medicine’, *Harvard Kennedy School Misinformation Review* [Preprint]. Available at: <https://doi.org/10.37016/mr-2020-44>.
- Newman, M.E.J. (2012) ‘Communities, modules and large-scale structure in networks’, *Nature Physics*, 8(1), pp. 25–31. Available at: <https://doi.org/10.1038/nphys2162>.
- O’Donnell, S.J. (2021) ‘Antisemitism under erasure: Christian Zionist anti-globalism and the refusal of cohabitation’, *Ethnic and Racial Studies*, 44(1), pp. 39–57. Available at: <https://doi.org/10.1080/01419870.2019.1704042>.
- Orlowski, A. (2022) ‘Putin-town and Z-Boys: analisi dell’Italietta fascia, rossa, bruna, boh’, *Rolling Stone Italia*, 28 May. Available at: <https://www.rollingstone.it/politica/putin-town-and-z-boys-analisi-dellitalietta-fascia-rossa-bruna-boh/642131/> (Accessed: 19 July 2022).
- Ouyang, F. and Reilly, C. (2022) ‘Terminology’, *Social Network Analysis*. Available at: <https://sites.google.com/a/umn.edu/social-network-analysis/terminology>.
- Papakyriakopoulos, O., Medina Serrano, J.C. and Hegelich, S. (2020) ‘The spread of COVID-19 conspiracy theories on social media and the effect of content moderation’, *Harvard Kennedy School Misinformation Review* [Preprint]. Available at: <https://doi.org/10.37016/mr-2020-034>.
- Pariser, E. (2012) *The filter bubble: what the Internet is hiding from you*. London: Penguin books.
- Pereira, P.S., Silveira, A. da S. and Pereira, A. (2020) ‘Disinformation and Conspiracy Theories in the Age of COVID-19’, *Frontiers in Sociology*, 5, p. 560681. Available at: <https://doi.org/10.3389/fsoc.2020.560681>.

- Pierri, F. *et al.* (2021) ‘VaccinItaly: monitoring Italian conversations around vaccines on Twitter and Facebook’, *arXiv:2101.03757 [cs]* [Preprint]. Available at: <http://arxiv.org/abs/2101.03757> (Accessed: 16 January 2022).
- Pili, J. and Puente, D. (2021) *Il «Grande reset»: dalla teoria del complotto QAnon sulla «pandemia inventata» alle opinioni di Freccero*, *Open*. Available at: <https://www.open.online/2021/09/25/grande-reset-teoria-del-complotto-freccero/> (Accessed: 24 July 2022).
- van Prooijen, J.-W., Douglas, K.M. and De Inocencio, C. (2018) ‘Connecting the dots: Illusory pattern perception predicts belief in conspiracies and the supernatural: Illusory pattern perception’, *European Journal of Social Psychology*, 48(3), pp. 320–335. Available at: <https://doi.org/10.1002/ejsp.2331>.
- Pulido Rodríguez, C. *et al.* (2020) ‘False news around COVID-19 circulated less on Sina Weibo than on Twitter. How to overcome false information?’, *International and Multidisciplinary Journal of Social Sciences* [Preprint]. Available at: <https://doi.org/10.17583/rimcis.2020.5386>.
- Quattrociocchi, W. and Vicini, A. (2016) *Misinformation: guida alla societ?? dell’informazione e della credulit??* Milano: FrancoAngeli.
- Rabinowitz, A. (2022) ‘Fears of creeping transhumanism give space for overt conspiracism in Gender Critical communities’, *The Skeptic*, 25 February. Available at: <https://www.skeptic.org.uk/2022/02/fears-of-creeping-transhumanism-give-space-for-overt-conspiracism-in-gender-critical-communities/> (Accessed: 24 July 2022).
- Roberto, K.J., Johnson, A.F. and Rauhaus, B.M. (2020) ‘Stigmatization and prejudice during the COVID-19 pandemic’, *Administrative Theory & Praxis*, 42(3), pp. 364–378. Available at: <https://doi.org/10.1080/10841806.2020.1782128>.
- Rose, H. (2021) *Pandemic Hate: COVID-related Antisemitism and Islamophobia, and the Role of Social Media*. Report. Institute for Freedom of Faith and Security in Europe. Available at: <https://archive.jpr.org.uk/object-2354> (Accessed: 21 July 2022).
- Rovetta, A. and Bhagavathula, A.S. (2020) ‘Global Infodemiology of COVID-19: Analysis of Google Web Searches and Instagram Hashtags’, *Journal of Medical Internet Research*, 22(8), p. e20673. Available at: <https://doi.org/10.2196/20673>.
- Sallam, M. *et al.* (2020) ‘Conspiracy Beliefs Are Associated with Lower Knowledge and Higher Anxiety Levels Regarding COVID-19 among Students

at the University of Jordan', *International Journal of Environmental Research and Public Health*, 17(14). Available at:
<https://doi.org/10.3390/ijerph17144915>.

Sartre, J.-P. (1995) *Anti-Semite and Jew*. New York: Schocken Books : distributed by Pantheon Books.

Schmidt, A.L. *et al.* (2018) 'Polarization of the vaccination debate on Facebook', *Vaccine*, 36(25), pp. 3606–3612. Available at:
<https://doi.org/10.1016/j.vaccine.2018.05.040>.

Scrivens, R. and Conway, M. (2019) 'The Roles of "Old" and "New" Media Tools and Technologies in the Facilitation of Violent Extremism and Terrorism', in *The Human Factor of Cybercrime*. Taylor & Francis.

Shahsavari, S. *et al.* (2020) 'Conspiracy in the time of corona: automatic detection of emerging COVID-19 conspiracy theories in social media and the news', *Journal of Computational Social Science*, 3(2), pp. 279–317. Available at: <https://doi.org/10.1007/s42001-020-00086-5>.

Sharma, K., Zhang, Y. and Liu, Y. (2021) 'COVID-19 Vaccines: Characterizing Misinformation Campaigns and Vaccine Hesitancy on Twitter', *arXiv:2106.08423 [physics]* [Preprint]. Available at: <http://arxiv.org/abs/2106.08423> (Accessed: 21 January 2022).

Shmargad, Y. and Klar, S. (2019) 'How Partisan Online Environments Shape Communication with Political Outgroups', *International Journal of Communication; Vol 13 (2019)* [Preprint]. Available at: <https://ijoc.org/index.php/ijoc/article/view/10127>.

Social Media Research Foundation (2016) *Twitter Analytics, Social Media Research Foundation*. Available at: <https://www.smrfoundation.org/networks/twitter-analytics/> (Accessed: 11 July 2022).

Spitale, G., Biller-Andorno, N. and Germani, F. (2021) *The anti-Green Pass rhetoric in Italy is shaped by anti-vaccine views and focuses on limitations of personal freedom: A social listening analysis on Telegram chats (Preprint)*. preprint. *Journal of Medical Internet Research*. Available at: <https://doi.org/10.2196/preprints.34385>.

Stano, S. (2021b) 'The Internet and the Spread of Conspiracy Content', in M. Butter and P. Knight (eds) *Routledge handbook of conspiracy theories*. First issued in paperback. London New York: Routledge, Taylor & Francis Group (Routledge handbooks), pp. 483–496. Available at: <https://doi.org/10.4324/9780429452734>.

Steele, B.J. and Homolar, A. (2019) ‘Ontological insecurities and the politics of contemporary populism’, *Cambridge Review of International Affairs*, 32(3), pp. 214–221. Available at: <https://doi.org/10.1080/09557571.2019.1596612>.

Stern, C. *et al.* (2014) “‘Ditto Heads’: Do Conservatives Perceive Greater Consensus Within Their Ranks Than Liberals?’, *Personality and Social Psychology Bulletin*, 40(9), pp. 1162–1177. Available at: <https://doi.org/10.1177/0146167214537834>.

Sunstein, C.R. (2017) *#Republic: divided democracy in the age of social media*. Princeton ; Oxford: Princeton University Press.

Townsend, M. (2022) ‘Concern for UK security as anti-vaxxer groups evolve towards US-style militias’, *The Guardian*, 15 January. Available at: <https://www.theguardian.com/uk-news/2022/jan/15/concern-for-uk-security-as-anti-vaxxer-groups-evolve-towards-us-style-militias> (Accessed: 17 January 2022).

United States Holocaust Memorial Museum (2022) *Protocols of the Elders of Zion*, United States Holocaust Memorial Museum. Available at: <https://encyclopedia.ushmm.org/content/en/article/protocols-of-the-elders-of-zion> (Accessed: 23 July 2022).

Uscinski, J.E. *et al.* (2020) ‘Why do people believe COVID-19 conspiracy theories?’, *Harvard Kennedy School Misinformation Review* [Preprint]. Available at: <https://doi.org/10.37016/mr-2020-015>.

Vieira, P. (2022) ‘What Is the Freedom Convoy? Trucker Protests in Canada Explained’, *Wall Street Journal*, 24 February. Available at: <https://www.wsj.com/articles/freedom-convoy-canada-trucker-protest-what-11644441237> (Accessed: 24 July 2022).

VOX Diritti *et al.* (2022) *La Mappa dell’Intolleranza - Anno 5*. Vox Diritti. Available at: <https://www.retecontroloodio.org/cmswp/wp-content/uploads/2021/04/Mappa-dellIntolleranza-5.0-1.pdf>.

Walter, A.S. and Drochon, H. (2020) ‘Conspiracy Thinking in Europe and America: A Comparative Study’, *Political Studies*, p. 003232172097261. Available at: <https://doi.org/10.1177/0032321720972616>.

Watkin, A.-L., Gerrand, V. and Conway, M. (2022) ‘Introduction: Exploring societal resilience to online polarization and extremism’, *First Monday* [Preprint]. Available at: <https://doi.org/10.5210/fm.v27i5.12595>.

Weill, K. (2020) ‘How “Plandemic” Lures Normies Down the Rabbit Hole’, *The Daily Beast*, 5 December. Available at:

<https://www.thedailybeast.com/how-conspiracy-theory-flick-pan-demic-lures-normies-down-the-far-right-rabbit-hole> (Accessed: 29 November 2021).

Weinberg, L. (2021) 'Antisemitism In The Anti-Vax Movement Is Nothing New – Centre for Analysis of the Radical Right', 25 November. Available at: <https://www.radicalrightanalysis.com/2021/11/25/antisemitism-in-the-anti-vax-movement-is-nothing-new/> (Accessed: 29 November 2021).

Wood, M.J., Douglas, K.M. and Sutton, R.M. (2012) 'Dead and Alive: Beliefs in Contradictory Conspiracy Theories', *Social Psychological and Personality Science*, 3(6), pp. 767–773. Available at: <https://doi.org/10.1177/1948550611434786>.

World Economic Forum (2022) *The World Economic Forum, World Economic Forum*. Available at: <https://www.weforum.org/> (Accessed: 24 July 2022).

Yao, Q. *et al.* (2021) 'Construction safety knowledge sharing on Twitter: A social network analysis', *Safety Science*, 143, p. 105411. Available at: <https://doi.org/10.1016/j.ssci.2021.105411>.

van Zoonen, L. (2012) 'I-Pistemology: Changing truth claims in popular and political culture', *European Journal of Communication*, 27(1), pp. 56–67. Available at: <https://doi.org/10.1177/0267323112438808>.