

The Internet and Conspiratorial Beliefs: The Inseparable Pair

Muhammad Beni Saputra

Abstrak/Abstract

Meskipun usianya cukup muda, Internet telah konsisten dan memainkan peran kunci dalam menciptakan dan menyebarluaskan keyakinan konspiratif. Ia juga telah memfasilitasi keyakinan konspirasi untuk tersebar luas sejak era Web 1.0 . Dengan penemuan Web 2.0 atau platform media sosial, kekuatan Internet menjadi lebih unggul yang memungkinkan berbagai argumen tentang keyakinan konspiratif tertentu bertemu. Dalam kehidupan nyata, keyakinan konspiratif yang disebarluaskan melalui Internet telah menyebabkan efek sosial yang parah khususnya mengenai vaksinasi. Adalah Internet yang membuat keyakinan konspiratif anti vaksinasi menjadi terkenal yang mengakibatkan program vaksinasi terhambat di beberapa negara termasuk di Indonesia.

Despite its quite young age, the Internet has been consistent and influential in creating and disseminating conspiratorial beliefs. It has also facilitated conspiratorial beliefs to circulate since the Web 1.0 era to the present time. With the invention of Web 2.0 and social media platforms, the power of the Internet becomes more eminent, including allowing different arguments about particular conspiratorial beliefs to intersect. In real life, conspiratorial beliefs disseminated through the Internet have caused severe social effects, particularly concerning vaccination. It is the Internet that makes anti-vaccination conspiratorial beliefs rise to fame, which results in vaccination programs hindered in several countries, including Indonesia.

Kata kunci/Keywords:

Keyakinan konspiratif, internet, media sosial, anti vaksinasi. Web 2.0

Conspiratorial beliefs, internet, social media, anti-vaccination, Web 2.0

Muhammad Beni Saputra Da'wah Faculty, UIN Sulthan Thaha Saifudin Lintas Jambi-Muaro Bulian KM. 16 Simpang Sungai Duren, Muaro Jambi 36363

m.benisaputra@uinjambi.ac.id

Introduction

On 8 March 2014, the world was shocked by the sudden disappearance of Malaysia Airlines Flight 370. Despite the absence of evidence, several conspiratorial beliefs circulated on the Internet speculating that the plane was either shot down by the US military, taken over by aliens, hijacked by terrorists, or many more other similar beliefs (Conspiracy Watch, 2014). A few years back, not long after the 9/11 tragedy, a picture of a male tourist wearing a heavy jacket, black cap, and sunglasses standing on top of the supposed to be the WTC tower circulated on the Internet. In the background, there was a plane approaching, about to hit the building he was standing on. A compelling caption claimed that the picture was obtained from a camera found in the rubble. The hoax picture soon became an online phenomenon which received attention from numerous mainstream media outlets worldwide ("Tourist Guy," n.d.).

Believing in conspiratorial beliefs is a worldwide phenomenon which is embraced by many people from all corners of the globe (Zonis & Joseph, 1994; Swami, 2012; Goertzel, 1994; McHoskey, 1995; Pipes, 1997; Southwell & Twist, 2004; Sunstein & Vermeule, 2009). The widely used term itself, conspiracy theory, bears negative characteristics and is considered to have a potential to trigger discrimination (Bilewizs & Krzeminski, 2010), racism and group exclusion (Miller, 2002; Räikkä, 2008), as well as collective riots (van Prooijen, 2012; van Prooijen & Jostman, 2013). Therefore, the supporters of conspiracy theory are often deemed illogical or irrational (Clarke 2002; Coady 2003). Some scholars, however, argue that conspiratorial beliefs are not by definition false as there have been many conspiracies in history which turned out to be true (M. J. Wood, Douglas, & Sutton, 2012). In addition, conspiratorial beliefs should be interpreted as a form of cultural practices that allow people to exercise the government's duty (Sasson, 1995; Fenster, 1999; Hellinger, 2003). Nevertheless, conspiratorial beliefs are increasingly featured in mainstream news (Byford 2011; Husting and Orr 2007), with the Internet plays a key role in disseminating them in such unprecedented amount (Clarke, 2007).

This paper aims to examine a literary review of conspiratorial beliefs and their inseparable connection with the Internet. Scholarly works with regards to the Internet or conspiratorial beliefs have been massively published but none pay close attention to the relationship between the two. The Internet has facilitated conspiratorial beliefs to circulate since the Web 1.0 era until the current Web 2.0 or social media generation. Each of these eras had its own big conspiratorial beliefs and characteristics in how those beliefs were spread. The special feature that is possessed by the present generation of the Internet is that it allows different arguments about particular conspiratorial beliefs to intersect. In such situation, the Internet acts as a battleground for conspiracy theorists and anti-conspiracy theorists to attack and defend each other's claims. Moreover, as argued by Clarke, Internet's development and its widespread use has had 'significant social effects' (Clarke, 2007). These social effects are severely serious when they come to vaccination; research suggests anti-vaccination conspiratorial beliefs have successfully hindered vaccination program in several countries.

Literature Review

Scholars agree that it is difficult to find a single working definition for conspiratorial beliefs (Grimes, 2016). But yet, we shall simplify the definition of conspiratorial beliefs here in accordance with what Sunstein et al have characterized as "an effort to explain some event or practice by reference to the machinations of powerful people, who attempt to conceal their role (at least until their aims are accomplished)" (Sunstein & Vermeule, 2009). This paper uses the term conspiratorial beliefs instead of conspiracy theories as a means to give a new perspective given the fact that the term conspiracy theories tends to have a negative connotation. Conspiratorial beliefs and conspiracy theories, however, have the same definition and will be used interchangeably in this paper.

Being the first generation of web, Web 1.0 was limited in functionality and accessibility. It was not designed for interactive purposes, neither was it dedicated to be used by the diverse group of Internet users. Web 1.0 began as a platform for businesses to deliver information to customers to market their products online (Cormode & Krishnamurthy, 2008). Such system led to the unproportional number between content creators and consumers that the latter far outnumbered the former. Massive changes took place after the introduction of Web 2.0 that this newer version of web enabled users to interconnect, communicate, and collaborate through social networks, blogs, forums, or any other virtual community (Paroutis & Al Saleh, 2009). Web 2.0's capability to allow users to exchange files, facilitate communication, work collaboratively, democratize and create contents forced websites to adapt which subsequently resulted in a rapid development of the web (Martínez-López, Anava-Sánchez, Aguilar-Illescas, & Molinillo, 2016).

Method

This paper is qualitative research whose data relies entirely on literary sources related to the Internet and conspiratorial beliefs. The data are gathered from both online and offline sources in the forms of books, journal articles, newspaper stories, videos, social media posts, and websites. The data are read, watched, and analyzed thoroughly in order to make critical analyses for the paper.

Results

The Power of the Internet

The Internet has enabled 'illegitimate' information to be exchanged and circulated to every corner of the earth (Birchall, 2011). This means the presence of the Internet has revolutionized two things, namely the shift of everyday rumours from real life to virtual life and the speed of the rumours' movement from one person to another. In addition, Jovan Byford argues that not only does the Internet enable conspiracy theories to circumnavigate the globe within days, if not hours, today it has also become the main platform for the dissemination of conspiracy theories, replacing traditional media like television and the press (Byford, 2011). It was the Internet that enabled and subsequently escalated communal conflicts in Indonesia. In the wake of the horrible clashes between Madurese migrants and the Dayak in Sampit, Central Kalimantan, back in the late 1990s, the Internet played its part by circulating the rumors regarding the stockpiling of bombs by Madurese which were supposed to be used to attack the Dayak (Bouvier & Smith, 2006). Radical groups in Indonesia used the Internet to disseminate conspiratorial beliefs surrounding anti-Americanism and Israel in relation to the bloody conflict between Christians and Muslims in Maluku in the early 2000s. Laskar Jihad, for example, smartly utilized the Internet to frame the massacres as a war against Islam which was propagated by the West. The framing of the conflict influenced the way other Islamic media outlets portrayed the issue in Maluku, and the presence of the group on the Internet inspired other like-minded websites to emerge (Lim, 2005). Interestingly, the disinformation about the Moluccan conflict reached international audience with the Internet became one of the most prominent platforms (Bubandt, 2008).

The Internet has successfully reduced financial cost to transmit conspiratorial beliefs. During the 1970s and the 1980s, for example, it was still difficult for the conspiracy community in the United States to produce and successfully distribute their conspiracy theory documentary as mainstream mass media and television were still 'out of reach'. The only exception to this was American Expose: Who Killed JFK?, an independently created documentary which made it to American television in 1988. Had not the maker of the video been Jack Anderson, who was a Pulitzer Prize winning journalist, there would have been a small chance for the video to appear on television (McIntosh, 2017). In these years, conspiratorial beliefs were distributed through books, pamphlets, mail order catalogues, or amateur videos that costed more money to produce and consume compared to the present World Wide Web era (Byford, 2011).

The Internet is widely used by people in all countries on earth. The data provided by Internet World Stats reveal that as of 31 December 2017, out of over 7 billion population of the world, 4.156.932.140 or 54.4 % of them were Internet users (World Internet Users, 2017). Internet users in the United States alone are 286.942.362, accounting 89.7 % of the whole nation's population (North America Internet Usage Statistics, 2017). Meanwhile, Indonesia had 143.26 million Internet users in that same year, or 54.68% of its whole population (APJII, 2017). This huge number matters because the United States is abundant with conspiracy theories; thus, a particular conspiratorial belief invented by an American can now easily reach all people worldwide due to the Internet.

The history of the Internet can be divided into two segments, Web 1.0 and Web 2.0. These two segments of the Internet have different characteristics which impact the development and dissemination of conspiratorial beliefs.

The Era of Web 1.0

The characteristic of Web 1.0 is that its fea-

ture was a read-only web (Aghaei, Nematbakhsh, & Farsani, 2012). In other words, Web 1.0 only functioned as a platform for people to establish an online presence without enabling them to directly interact with each other. The first major conspiracy during this Internet era was the explosion of TWA 800 flight (Byford, 2011), which exploded over the Atlantic Ocean on 17 July 1996. Within weeks after the explosion, an unknown memo circulated in the World Wide Web, asserting that the explosion was resulted from a navy missile's unintentional discharge. At that time, Internet users could not directly react to the issue or get involved in direct online discussion as Web 1.0 did not have such function. Instead, they created web pages to repeat and generate the allegations in a slightly different form. Nevertheless, the conspiratorial belief managed to embroil CNN and all three network evening newscasts into discussions four months after the tragedy, on 8 November 1996. These newscasts reported that Pierre Salinger, then the President Kennedy's press secretary, endorsed the navy missile theory (Miller, 2002). The involvement of CNN and other mainstream news outlets would have not occurred if the Internet had not 'invented' the theory.

The role of Web 1.0 in creating and promoting conspiracy theories was also seen in the case of Princess Diana's death. As argued by Martyn Gregory in *Diana: the last days*, the Internet was a significant aspect in the transition of the Princess's death into a conspiracy as it 'gave many conspiracy theories their first expression, and then amplified and accelerated their trajectories in the USA and in Fayed's Egyptian homeland' (Gregory, 2007). On alt.conspiracy and alt.conspiracy.princess.diana, Internet users at that time expressed their analyses, concluding that it was not an "accident" but instead was "staged". Again, the heated discussion about the issue circulated within minutes on the Internet before 'the non-cyber world eventually joined in' (Colker, 1997). Moreover, the theory that circulated on the Internet accusing British, French, and US intelligence agencies as the combined murderers of the Princess became 'standard offerings of the Diana death industry' before 'finding terrestrial expression in newspapers and on television' (Gregory, 2007), amplifying the huge role of the Internet as a creator of conspiratorial beliefs

Web 1.0 is fast and powerful in disseminating conspiratorial beliefs, as proven by a British Citizen named Darren Williams. In 2004, he made a video containing flashes of photographs entitled 'Loose Change', which was afterwards soon downloaded by millions of people from all over the world. His website collapsed in just 36 hours after the link to the video was posted on www.Cassiopaea.org by his online group mate Knight-Jadczyk. This was not the only case because other similar cases also happened. In Texas, a video drew almost 700.000 visitors a day to a libertarian website owned by a former casino worker. In Louisiana, a young Navy specialist's web page was suddenly crowded by more than 20.000 hits after the video was put on the page. In Alberta, the link to the video could cause traffic to cabdriver's web site to increase more than six times. Finally, several webmasters had to make solicited donations due to the great demand for the video to pay for the extra bandwidth, strengthening Internet's role as the pioneer of conspiratorial beliefs. Kathryn S. Olmsted considered the video in her book Real Enemies as 'the most influential piece of propaganda for 9/11 conspiracists'(Olmsted, 2009) due to its meteoric rise after being put on the Internet. Just in eighteen months after it was uploaded, the film had been watched by more than ten million people from around the globe (Sales, 2006).

9/11 was, perhaps, the last major conspiracy event in the era of Web 1.0. Just the same as the two aforementioned mega events, 9/11 conspiracy theories also first appeared on the Internet before being discussed on mainstream media. Just within hours, at 3:12 pm in the afternoon on that day, a guy named David Rostcheck proposed a theory accusing 9/11 as an inside job (Message Concerning the Collapse of the World Trade Center Towers. n.d.). He was not alone as there were more people offered their 'analyses' on the following days with various accusations as compiled by Google Sites.

Under a title 'The History of 9/11 Conspiracy Theories', Google provides a list of conspiracy theories concerning 9/11 from the time it happened to 2003. What is interesting from the list is that it is obvious while Web 1.0could successfully distribute theories fast, it was still a one-way communication. All theories were published in the form of articles; thus, people could only read or modify them without being able to directly comment. It is understandable because Web 1.0 did not have such feature.

Moreover. the Internet also functioned as a huge database for different conspiracy theories. A web page created in 2002 by a Stanford graduate under pseudonym complete9/11timeline.org Paul Thomson, , for example, provided thousands of different hyperlinks and annotations relating to 9/11 events and actors, which is very essential for researchers as well as ordinary people around the world to access news stories about the attack. The creator of the Loose Change video even used complete9/11timeline.org in finding their research while making the video.

While the era of Web 1.0 could not accommodate its users to directly discuss conspiratorial beliefs, it is undeniable that it was still very powerful in inventing and spreading conspiratorial beliefs very quickly.

The Era of Web 2.0

The term Web 2.0 first came out around 2005 (Constantinides & Fountain, 2008). This new

version of online applications makes the Internet even more powerful in creating, promoting, accelerating, and disseminating various conspiratorial beliefs. The Web 2.0 enables everyone who has an access to the Internet to publish web posts, movies, and music. It is also known as participative web due to its nature that enables people to directly interact with each other (Aghaei et al., 2012). Social networking and video sharing sites belong to this new Internet version.

As Eric B. Weiser puts it, today's Internet is more than 'simply a mechanism for commerce and information dissemination' (Weiser, 2001). The emergence of Web 2.0 has surely revolutionized the way people interact as social media platforms have turned into a 'second society' for those who connect to the Internet. Data released by a statistics company, Statista, reports that the number of social media users worldwide in 2018 reached 2.46 billion people, with Facebook became the most used platform with its nearly 2.2 billion active users, followed by YouTube (1.9 million users) and WhatsApp (1.5 million users) (Statista, 2018).

The coming of Web 2.0 was warmly welcomed by those who like to disseminate conspiratorial beliefs, making conspiracy theorists more active on social media. This new breakthrough has resulted in the way a piece of information travels, that conspiratorial beliefs can now move from one person to another very much more easily than before. Furthermore, social media platforms also enable people to access and accept ridiculous viewpoints rejected by the majority of people (M. Wood, 2013). A recent collaborative research analysing 271.296 Facebook posts from 73 Facebook pages finds that out of the entire analysed posts, 200.000 were from alternative conspiracy news while only 60.000 were from mainstream scientific news. The research also reveals that conspiracy news are more favoured by Facebook users than science-related news with the total likes of 6.5 million and 2.5 million respectively (Bessi et al., 2015). The data implies about the readership pattern of conspiratorial beliefs' followers, who have the tendency to reject official sources and rely more on illegitimate ones.

The nature of social media platforms as networking sites where real people connect with their friends from real life has pushed them not to conceal their true identities. This phenomenon is quite different compared to the older era of the Internet, in which people were relatively anonymous in chat rooms or newsgroups (Bargh & McKenna, 2004). As a result, conspiratorial beliefs are now disseminated openly by even prominent figures. The prime example to this is the current president of the US, Donald Trump. He uses his official Twitter account to communicate with netizens and actively disseminate conspiratorial beliefs. The latest one occurred on 28 January 2016, as reported by CNBC, in which the controversial state figure retweeted a photoshopped image of Prince Al-Waleed of Saudi Arabia standing shoulder-to-shoulder beside Fox news anchor Megyn Kelly sending a message to the American public that the prince had a great influence on the United States pay television news channel. Trump wanted to convince Americans that Fox was a Saudi-related media to justify his decision to boycott the media's the Thursday-night debate show. Trump's accusation proves Twitter's power in spreading conspiratorial beliefs as Trump's tweet was retweeted by 5.263 people and was liked by 7.765 others (Whitten, 2016). Likes and retweets are significant because a like means positive feeling to the tweet and a retweet means the will of the user to share the content, thus increasing the visibility of the content (Bessi et al., 2015).

Trump's involvement in spreading conspiratorial beliefs through Twitter is not a surprise. Between 2012 and 2014, he consistently tweeted that global warming was a hoax. During this period, at least there were 4 tweets he made to support his accusation. In one of his tweets, he said that 'The concept of global warming was created by and for the Chinese in order to make U.S. manufacturing non-competitive'. This tweet, which was posted in 2012, was retweeted by 25.627 Twitter's users and was liked by 15.289 users (Schulman, 2015).

Besides social media, another influential development brought by Web 2.0 is YouTube. The website's slogan 'broadcast yourself' has truly made everyone become a director of any kinds of movies, destroying the old obstacle which made videos out of ordinary people's reach. YouTube's feature for sharing and commenting also enables people to interact and share a particular video to their friends on social media platforms.

Jean Burgess and Joshua Green in their book entitled YouTube: Online Video and Participatory *Culture* argue that over the years, YouTube has grown significantly into its prominence. In 2007, the video sharing site was Britain's most popular entertainment website and was listed in the top 10 of the most visited websites on earth. A year later, it hosted 85 million videos. YouTube has also kicked out traditional video media such as Fox Interactive Media as 37% of its videos Internet were watched in the US, much higher than Fox which only managed to get 4.2% of its videos watched (Mosebo, 2009). Given this importance, it is interesting to find out what role YouTube plays in disseminating conspiratorial beliefs as more people are watching YouTube videos every year.

YouTube indeed fulfils the two abovementioned categories as the video sharing site is used by Internet users as both resource and medium for information gathering. As a resource, while there is no official information from YouTube about the exact number of videos it has, You-Tube hosts approximately 300 hours of videos per minute (DMR Stats, 2016). In addition, You-Tube Statistics reports that there are hundreds of millions hours of YouTube videos watched by people every day (YouTube, 2016). Some of these videos are of course related to conspiratorial beliefs. For example, three YouTube videos with key word 'top ten conspiracy theories' generate incredible number of views. 'Another Top 10 Conspiracy Theories of All Time' by WatchMojo.com has been watched 15,629,395 times (WatchMojo, 2018), '10 Conspiracy Theories that turned out to be TRUE! by Matthew Santoro 8,651,119 times (Santoro, 2018), and 'Top 20 Disney Movies Theories' by blameitonjorge 6,229,541 times (Blameitonjorge, 2018). These three videos are only a few examples of probably millions of other similar videos as there are about 2.610.000 search results of conspiratorial videos on YouTube. In the case of Indonesia, YouTube search with key words "teori konspirasi" generates a big number of videos related to various conspiracy theories from flat earth to Apollo 11's moon landing. All the videos have been watched by thousands and even millions of viewers ("teori konspirasi - You-Tube," n.d.). The search may give similar results when using other similar keywords.

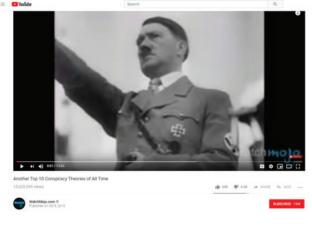


Figure 1. A screen capture of a YouTube video by WatchMojo.com

In addition, it seems that YouTube is also an ideal place for 'conspiracy entrepreneurs', a group of people who directly or indirectly benefit from conspiracy theories (Sunstein & Vermeule, 2009). In Indonesia this group ranges from prominent figures, Moslem preachers, to well-known national media, all of whom attempt to offer insights on conspiracy-theory-related issues such as flat earth, vaccination, or freemasonry. It is not a secret that the more a video is watched on YouTube the more money comes into the videos' makers' pockets from advertisements. Thus, it is understandable if the above YouTube videos' owners as well as videos uploaded by Indonesian YouTubers such as Najwa Shihab provide links directing viewers to their other social media accounts like Twitter, Facebook, website, and Instagram. The purpose is obvious, namely to make these viewers loyal to the video owners' business domain as these viewers pose as a source of income. Given this reason, the Internet, YouTube, and other websites also play a role to commercialize conspiracy theories.

The description of Najwa Shihab's flat earth video includes links to her social media accounts

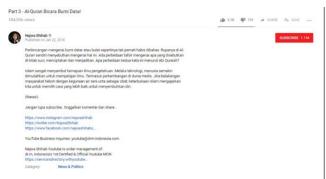


Figure 2. The description of Najwa Shihab's flat earth video includes links to her social media accounts and business email address.

and business email address.

Besides providing analysis for each conspiracy theory, the above mentioned YouTube videos also provide links to other videos that have the same characteristics, prompting people to watch more similar videos. In addition, the sharing feature embedded on YouTube allows it to perform its role as a medium for disseminating conspiratorial beliefs. It gives viewers the first bait before getting them stuck in actively endorsing, opining, commenting, sharing, or even countering what they have just seen. This could have a serious impact, especially on those who believe in conspiracy theories. According to psychologists, people who, endorse a particular conspiratorial belief are very likely to believe in another conspiracy (M. J. Wood et al., 2012). It is of course difficult to measure how a particular video can influence or even change someone's opinion. However, given the numerous number of likes on each video compared to thumb downs (tens of thousands likes vs few thousands), it is not an exaggeration that the videos are endorsed by more people who share similar beliefs. Furthermore, this situation could also trigger what is called 'confirmation bias', that is the tendency of people to look for evidence of what they already believe (Swami et al., 2011). This opens a new dimension of Internet's role as a battlefield for people, a ground to create a war, to defend, to strike, and to start a new war. Web 2.0 surely has more features than its previous version, Web 1.0, and as a result, the rich features also impact the role the Internet plays in disseminating conspiratorial beliefs.

The Internet as a Battleground

The Internet plays a multipolar role, bridging those who believe in conspiratorial beliefs with those who disbelieve them. In other words, the Internet acts as a battleground for these two groups to opine and refute. Clarke argues that the Internet allows anti-conspiracy theorists to criticize conspiracy theories quickly (M. Wood, 2013). This happens because the interactive feature provided by Web 2.0 enables people to easily communicate with each other about a particular topic. The comment sections of the previously mentioned three YouTube videos, for examples, are imbued by so many people debunking each other.

The three videos attract comments ranging from slightly above five thousands to almost ten thousand. The commenters refuted each other about the videos in 'top comments' section. In '10 Conspiracy Theories that turned out to be TRUE!', some of the commenters backed conspiracy theories while some others did not. An account named BellaBehindAcancer, for example, commented 'You forgot 9/11'. This comment was commented by other accounts. Yoshipool 420, for instance, commented 'don't bring that up', supported by Charlotte and anyseattleteamfangamer.

In another video entitled 'Flat Earth Liars exposed. MAP. Antarctic isn't the outer perimeter' by TigerDan925 (TigerDan925, 2016), which challenges the mainstream belief about the fact that the earth is round, incites similar debate. An account named MrThriveAndSurvive protested the dislikes made by other accounts, asking 'Why all the thumb's down?'. His complaint obtained 76 replies, with one of the answers made by Lord Steven Christ said 'you will be getting sick because you resist the truth [...]'. Similar war is pervasive as well in the comments section of three YouTube videos previously mentioned and possibly in million other videos including those created and uploaded by Indonesian YouTubers, which are almost impossible to be written one by one. While this is true that some of the commenters do not use their real names when commenting, it is wrong to assume if the commenters are not real; they are real people with real physical bodies, ideologies, and social lives.

The same dynamism is also found on other social media platforms such as Quora. This more 'professional and academic' website hosts a wide variety of 'conspiracy theories' topic, which has 175.1 thousand people following it (Quora, 2018). A question entitled 'Was 9/11 a conspiracy?', for instance, has been answered by over 100 people in various ways; some said yes, while others said no. Each person had their own explanation and evidence (Quora, n.d., p. 11). The differences between Quora's and YouTube's users are that on Quora, many users use their real names coupled with their professional degrees (some of them even include their professions like writer, Psychology graduate, and so on), although there are others who go anonymous as well. The other difference is the language used by Quora's users, which tends to be more formal compared to the language used in YouTube's comment sections. Some Quora's users also use YouTube videos to back up their explanations, signifying YouTube's role as a source and medium of conspiratorial beliefs. Youtube and Quora have surely become favourite spots for two different kinds of believers of conspiratorial beliefs to debate and refute, positioning the Internet as a battleground for them to fight.

Quora's Conspiracy Theories are not only followed by numerous users but also features other conspiracy-theory-related issues as seen on the

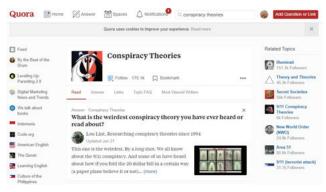


Figure 3. Quora's Conspiracy Theories are not only followed by numerous users but also features other conspiracy-theory-related issues as seen on the right side of the page here.

right side of the page here.

An Indonesian online forum whose dynamism and function are very much similar to that of Quora is Kaskus. Kaskus provides a medium for supporters and debunkers of conspiracy theories to virtually meet to argue and justify their beliefs. Kaskus hosts various conspiracy theory threads such as flat earth, illuminati, freemason, and new world order. A thread on Kaskus can be viewed, shared, or commented by many users. A thread entitled 'MENJAWAB FLAT EARTH 101, MENGUNGKAP KEBOHONGAN PROPAGAN-DA BUMI DATAR.' for example, has been seen 1,077,684 times, and shared by 6.400 users. The comments on the thread are massive totalling 501 pages ("KASKUS," n.d.).

A screen capture of Kaskus. It is noticeable here that the creator of the thread has made a video about the topic to better monetize the content.

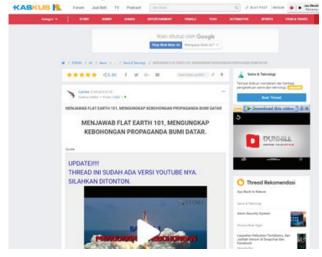


Figure 4. A screen capture of Kaskus. It is noticeable here that the creator of the thread has made a video about the topic to better monetize the content.

Discussion

The Internet plays a key role in creating, promoting, and facilitating anti-vaccines conspiratorial beliefs. The situation coincides well with the fact that patients in the present times often turn to the Internet for obtaining advice and knowledge regarding vaccines (Kata, 2012). The patterns of conspiratorial beliefs on vaccines are varied according to the research done by Kata. All the websites she analysed promoted a variety of accusations, such as allegations that vaccines are designed to control the population or to create new pandemics (Kata, 2010). In addition, similar beliefs can also be found in other nations. In Romania, for example, there are discussions on the Internet which directly blame the American government of intentionally infecting people with HIV through the use of polio vaccines. In Poland, anti-vaccination online communities believe that swine flu and bird flu were devised purposefully by big pharmaceutical companies. In English speaking communities of Eastern Europe, online societies accused immunization as a plot to reduce the world population (UNICEF, 2013). In Mexico, during h1n1 flu pandemic in 2009, conspiracy theories emerged on the Internet, accusing the flu pandemic as artificially created disease, plots hatched by American pharmaceutical companies and government, or used to test biological weapons (Kasarda, 2013). In Indonesia, vaccines are most often identified by local anti-vaccine movement as 'haram' or prohibited according to the religion of Islam; thus, Muslims must not have their children vaccinated. The campaign intensified amid diphtheria outbreak in Indonesia in 2017, which resulted in a petition opposing the movement. The petition, which was posted on online petition website change.org, was signed by over 7.000 people (Change, 2017).

Although the Internet might not be widely used by people in African and Asian third world countries' remote areas, it does not necessarily mean the cyber world does not have any impacts on the continents. As reported by U.S News, the resistance towards vaccines were widespread in Kenya, northern Nigeria, West Africa, and India, to name a few, as the movement was mostly promoted by political and religious leaders in those nations (USNews, 2015). Conspiratorial beliefs may travel by mouth from a person who has an access to the Internet and/or offline media (Kasarda, 2013). Thus, it is very possible that those leaders disseminated anti-vaccine beliefs to the of the country by direct means or by using offline media outlets such as state-owned televisions or commercial print media.

Conspiratorial beliefs on vaccines have succeeded in influencing parents not to vaccinate their children. Daniel Jolly with several other researchers conducted a study on two groups of people, in which one of the group members were exposed to perceived dangers of vaccines while the others were not. The research reveals that participants exposed to conspiracy theories 'showed less intention to vaccinate than those in the anti-conspiracy controls' (Jolley & Douglas, 2014). A survey conducted in four states in the US, namely Colorado, Massachusetts, Missouri, and Washington, finds that 190 out of 277 respondents, or 69% of respondents, admitted that they requested vaccine exemptions because they were afraid that vaccine might harm their children (Salmon et al., 2005). In the case of Indonesia, although there has not been any academic research, pro-vaccine movements (Change, 2017) as well as the minister of health (Suara, 2018) blame anti-vaccines movement for slowing down the process of vaccination. In 2012, UNICEF reported that only 66% of Indonesian children received complete basic immunization. Meanwhile, the rate of children who did not receive all three doses of diphtheria, tetanus, and pertussis vaccines in the previous year was 23% (UN Global Pulse, 2015).

Social media plays a crucial role in supporting the above phenomenon because not only social media allows people to share negative sentiments toward vaccines on many different online platforms, they can also gather people with 'common interests, worldviews and narratives' together (Bessi et al., 2015). This means when people are assembled, it is likely for them to share the same view, increasing their trust toward each other and reinforcing their prevailing beliefs. Worse, a research reveals that parents actively use social media platforms to share their decisions on whether to vaccinate their children or not (UNICEF, 2013). This is harmful because peer recommendations circulated on social media platforms greatly affect people's decisions (Wang, Yu, & Wei, 2012), and 70% of people consider information they get from the Internet in making decisions on medical treatment (Kata, 2010). Conspiratorial beliefs against vaccines shared by a person to his friends will greatly impact their views and decisions on vaccines. Moreover, social media also enables parents to be constantly connected with the "influencers". This is evident by the huge number of fans or followers on Facebook and Twitter surveyed by UNICEF. An account called 'Mothering Magazine', for example, have 66.504 Facebook fans and 102.173 followers on Twitter (UNICEF, 2013), while TAN-YA ASI For Thinker Parents (Gentle Parenting, 2017), a Facebook group reported by an Indonesian pro-vaccines movement to charge.org, has almost 6.000 members. The possibility of Indonesian parents to be exposed to and influenced by anti-vaccines movement is very high as data acquired in 2017 showed that most Indonesians used the Internet for chatting (89.35%) and interacting on social media platforms (87.13%) (APJII, 2017)

These facts seem to fulfil the scientific prediction made by Paul Davies and other scholars in 2002, that parents would massively encounter anti-vaccination movement on the Internet (Davies, Chapman, & Leask, 2002). Clearly, the emergence of Web 2.0 combined with the high penetration of the Internet, and the massive use of social media, have turned the possibility into a reality. While both Web 1.0 and Web 2.0 have the same capability in disseminating conspiratorial beliefs regarding vaccination, improvements in web system as featured in Web 2.0 has exacerbated and will always threat the vaccination programs in many parts of the world.

Conclusion

This paper explains how the Internet plays a significant role in both creating and disseminating conspiratorial beliefs. As several cases demonstrate, it is clear that since the emergence of Web 1.0, the Internet has played an important role in creating and promoting conspiratorial theories either through news, images, or videos. Moreover, it has also functioned as a database where different conspiracy theories are stored. However, the world has witnessed an incredible transformation in the role of the Internet in regard to the production and dissemination of conspiracy when Web 2.0 was introduced in 2005. This phenomenon has led conspiratorial beliefs to be disseminated more freely and easily from anywhere by anyone. What is more important about this era is that not only people now can participate in the creation and dissemination of conspiracy theories, but also the Internet has become a platform for those who believe or disbelieve in conspiratorial theories to engage in debates or discussions, positioning the Internet as a battleground for fight.

Looking into the future, with the growing usage of social media, especially with the introduction of Web 3.0 where the Internet increasingly provides a platform for people to interact and to engage in different types of discussions, it cannot be denied that the role of online media in both creating and spreading conspiratorial views will increase even more. It is likely that people will find it much easier to obtain information from online sources as their online presence also increases. At the same time, however, these online platforms will also provide people with an opportunity to further research and determine which information is conspiratorial and which is not. More importantly, the Internet will remain to be a battleground for information.

Bibliography

- Aghaei, S., Nematbakhsh, M. A., & Farsani, H. K. (2012). Evolution of the World Wide Web: From Web 1.0 to Web 4.0. *International Journal of Web & Semantic Technology*, 3(1), 1.
- APJII, A. P. J. I. I. (2017). Penetrasi dan Perilaku Pengguna Internet Indonesia.
- Bargh, J. A., & McKenna, K. Y. (2004). The Internet and Social Life. Annual Review of Psychology. 55, 573–590.
- Bessi, A., Coletto, M., Davidescu, G. A., Scala, A., Caldarelli, G., & Quattrociocchi, W. (2015). Science vs Conspiracy: Collective Narratives in the Age of Misinformation. *PloS One*, 10(2), e0118093.
- Bilewicz, M., & Krzeminski, I. (2010). Anti-Semitism in Poland and Ukraine: The Belief in Jewish Control as a Mechanism of Scapegoating. *International Journal of Conflict and Violence (IJCV)*, 4(2), 234–243.
- Birchall, C. (2011). Knowledge Goes Pop: From Conspiracy Theory to Gossip. Berg Publishers.
- blameitonjorge. (n.d.). Top 20 Disney Movies Theories | blameitonjorge. Retrieved September 4, 2018, from https://www.youtube.com/ watch?v=XqRrOm032os
- Bouvier, H., & Smith, G. (2006). Of Spontaneity and Conspiracy Theories: Explaining Violence in Central Kalimantan. Asian Journal of Social Science, 34(3), 475–491.
- Bubandt, N. (2008). Rumors, Pamphlets, and the Politics of Paranoia in Indonesia. *The Journal of Asian Studies*, 67(3), 789–817.
- Byford, J. (2011). Conspiracy Theories: A Critical Introduction. New York: Springer-Verlag.
- Clarke, S. (2002). Conspiracy Theories and Conspiracy Theorizing. *Philosophy of the Social Sciences*, 32(2), 131–150.
- Clarke, S. (2007). Conspiracy Theories and the Internet: Controlled Demolition and Arrested Development. *Episteme*, 4(2), 167–180.
- Coady, D. (2003). Conspiracy Theories and Official Stories. *International Journal of Applied Philosophy*, 17(2), 197–209.
- Colker, D. (n.d.). On Internet, Conspiracy Theorists Take Diana's Death and Run With It - latimes. Retrieved September 4, 2018, from http://articles.latimes.com/1997/sep/04/news/mn-28731
- Conspiracy Watch. (n.d.). 10 Most Popular Malaysia Airlines Flight MH370 Conspiracy Theories. Retrieved from http://conspiracy-watch. org/10-most-popular-malaysia-airlines-flight-mh370-conspiracy-theories/
- Constantinides, E., & Fountain, S. J. (2008). Web 2.0: Conceptual Foundations and Marketing Issues. *Journal of Direct, Data and Digital Marketing Practice*, 9(3), 231–244.
- Cormode, G., & Krishnamurthy, B. (2008). Key Differences Between Web 1.0 and Web 2.0. *First Monday*, 13(6).
- Davies, P., Chapman, S., & Leask, J. (2002). Antivaccination Activists on the World Wide Web. Archives of Disease in Childhood, 87(1), 22–25.
- Demographics of Social Media Users in 2015 | Pew Research Center. (n.d.). Retrieved September 4, 2018, from http://www.pewinternet.org/2015/08/19/the-demographics-of-social-media-users/
- DMR Stats. (n.d.). 160 Amazing YouTube Stats and Facts (August 2018). Retrieved September 4, 2018, from https://expandedramblings. com/index.php/YouTube-statistics/
- Fenster, M. (1999). Conspiracy Theories: Secrecy and power in American Culture. Minneapolis: University of Minnesota Press.
- Global social media ranking 2018 | Statistic. (n.d.). Retrieved September 4, 2018, from https://www.statista.com/statistics/272014/globalsocial-networks-ranked-by-number-of-users/
- Goertzel, T. (1994). Belief in Conspiracy Theories. *Political Psychology*, 15 (4), 731–742.
- Gregory, M. (2007). Diana: the Last Days. London: Macmillan.
- Grimes, D. R. (2016). On the Viability of Conspiratorial Beliefs. *PloS One*, 11(1), e0147905.
- Harrison, G. (2016, January 12). The Age of Conspiracy. Retrieved September 4, 2018, from https://grahamharrison.me/2016/01/12/ the-age-of-conspiracy/
- Here are the Dumbest Things Donald Trump Has ever Said about Science. (n.d.). Retrieved September 4, 2018, from https://www. motherjones.com/politics/2015/06/donald-trump-science-climate-change-vaccines-autism-ebola/
- Husting, G., & Orr, M. (2007). Dangerous Machinery:"Conspiracy Theorist" as a Transpersonal Strategy of Exclusion. *Symbolic Interaction*, 30(2), 127–150.
- Jo Sales, N. (n.d.). Click Here for Conspiracy | Vanity Fair. Retrieved September 4, 2018, from https://www.vanityfair.com/news/2006/08/ loosechange200608

- Jolley, D. (n.d.). Childhood Vaccinations: What is the Role of Conspiracy Theorising? | The Psychology of Conspiracy Theories. Retrieved September 4, 2018, from https:// conspiracypsychology.com/2013/06/29/childhood-vaccinations-what-is-the-role-of-conspiracy-theorising/
- Jolley, D., & Douglas, K. M. (2014). The Effects of Anti-vaccine Conspiracy Theories on Vaccination Intentions. *PloS One*, 9(2), e89177.
- Kasarda, M. (2013). The Media Environment and Anti-Vaccination Movements. *European Scientific Journal*, 9(19).
- Kaskus (n.d). Menjawab Flat Earth 101, Mengungkap Kebohongan Propaganda Bumi Datar. Retrieved November 22, 2018, from https://www.kaskus.co.id/thread/57cf656862088171708b4567
- Kata, A. (2010). A Postmodern Pandora's Box: Anti-vaccination Misinformation on the Internet. *Vaccine*, 28(7), 1709–1716.
- Kata, A. (2012). Anti-vaccine Activists, Web 2.0, and the Postmodern Paradigm: An Overview of Tactics and Tropes Used Online by the Anti-vaccination Movement. *Vaccine*, 30(25), 3778–3789.
- Keen, A. (n.d.). Web 2.0. Retrieved September 4, 2018, from https:// www.weeklystandard.com/andrew-keen/web-20
- Koerth-Baker, M. (n.d.). Why Rational People Buy Into Conspiracy Theories - The New York Times. Retrieved September 4, 2018, from https://www.nytimes.com/2013/05/26/magazine/why-rational-people-buy-into-conspiracy-theories.html?_r=0
- Lim, M. (2005). Islamic Radicalism and Anti-Americanism in Indonesia: The Role of the Internet. Retrieved from http://www.eastwestcenterwashington.org/publications.
- Martínez-López, F. J., Anaya-Sánchez, R., Aguilar-Illescas, R., & Molinillo, S. (2016). Evolution of the Web. In Martinez-Lopez, F.J., Anaya-Sánchez, R., Aguilar-Illescas, R., Molinillo, S. (eds). Online Brand Communities (pp. 5–15). New York: Springer.
- MatthewSantoro. (n.d.). 10 Conspiracy Theories That Turned out to be True! Retrieved September 4, 2018, from https://www.youtube. com/watch?v=nYIVXw4RPqg
- McHoskey, J. W. (1995). Case Closed? On the John F. Kennedy Assassination: Biased Assimilation of Evidence and Attitude Polarization. *Basic and Applied Social Psychology*, 17(3), 395-409.
- McIntosh, H. (2017). Book Review- New Documentary Ecologies: Emerging Platforms, Practices and Discourses. *International Journal of Communication*, 11, 1280-1283.
- Message Concerning the Collapse of the World Trade Center Towers. (n.d.). Retrieved September 4, 2018, from http://www.serendipity.li/wot/davidr.html
- Miller, S. (2002). Conspiracy Theories: Public Arguments as Coded Social Critiques: a Rhetorical Analysis of the TWA Flight 800 Conspiracy Theories. *Argumentation and Advocacy*, 39(1), 40–56.
- Morello, C. (n.d.). Conspiracy Theories Flourish on the Internet (washingtonpost.com). Retrieved September 4, 2018, from http:// www.washingtonpost.com/wp-dyn/articles/A13059-2004Oct6. html?noredirect=on
- Mosebo, T. (2009a). Jean Burgess & Joshua Green: YouTube-Online Video and Participatory Culture. *MedieKultur: Journal of Media and Communication Research*, 25(47), 3.
- Najwa Shihab. (n.d.). *Part 3 Al-Quran Bicara Bumi Datar*. Retrieved from https://www.youtube.com/watch?v=wU9GPbSaGjM
- North America Internet Usage Statistics, Population and Telecommunications Reports. (n.d.). Retrieved September 4, 2018, from https://www.internetworldstats.com/stats14.htm#north
- Olmsted, K. S. (2009). *Real Enemies: Conspiracy Theories and American Democracy, World War I to 9/11*. New York: Oxford University Press.
- O'Neill, P. H. (n.d.). Why Your Facebook News Feed is Full of Conspiracy Theories - The Washington Post. Retrieved September 4, 2018, from https://www.washingtonpost.com/news/the-intersect/ wp/2015/04/23/why-your-facebook-news-feed-is-full-of-conspiracy-theories/?utm_term=.692f6b259439
- Paroutis, S., & Al Saleh, A. (2009). Determinants of Knowledge Sharing Using Web 2.0 Technologies. *Journal of Knowledge Management*, 13(4), 52–63.
- Pentagon Strike. (n.d.). Retrieved September 4, 2018, from http://www. pentagonstrike.co.uk/flash.htm
- Pipes, D. (1999). Conspiracy: How the Paranoid Style Flourishes and Where it Comes From. New York:Simon and Schuster.
- Quora. (n.d.-a). Conspiracy Theories Quora. Retrieved September 4, 2018, from https://www.guora.com/topic/Conspiracy-Theories
- Quora. (n.d.-b). Was 9/11 a Conspiracy? Quora. Retrieved September 4, 2018, from https://www.guora.com/Was-9-11-a-conspiracy

- Räikkä, J. (2009). On Political Conspiracy Theories. *Journal of Political Philosophy*, 17(2), 185–201.
- Salmon, D. A., Moulton, L. H., Omer, S. B., Patricia deHart, M., Stokley, S., & Halsey, N. A. (2005). Factors Associated with Refusal of Childhood Vaccines among Parents of School-aged Children: A Case-Control Study. *Archives of Pediatrics & Adolescent Medicine*, 159(5), 470–476.
- Sasson, T. (1995). African American Conspiracy Theories and the Social Construction of Crime. *Sociological Inquiry*, 65(3–4), 265–285.
- Schulman, J. (n.d.). 13 Tweets That Definitively Prove That Donald Trump Is Not a Scientist – Mother Jones. Retrieved September 4, 2018, from https://www.motherjones.com/politics/2015/06/ donald-trump-science-climate-change-vaccines-autism-ebola/
- Series, G. P. P. (2015). Understanding Immunisation Awareness and Sentiment Through Social and Mainstream Media. *Global Pulse Project Series*, (19).
- Social Times. (n.d.). People Consume Facebook Conspiracy Theories as Real News – Page 202992 – Adweek. Retrieved September 4, 2018, from https://www.adweek.com/socialtimes/facebook-real-news-vs-conspiracy-theories/202992/
- Southwell, D., & Twist, S. (2004). *Conspiracy Files: Paranoia, Secrecy, Intrigue*. Westminster, Maryland: Gramercy Books.
- Statista . (n.d.). Global Social Media Ranking 2018 | Retrieved September 4, 2018, from https://www.statista.com/statistics/272014/ global-social-networks-ranked-by-number-of-users/
- Statista. (n.d.). U.S. Population with a Social Media Profile 2018 Retrieved September 4, 2018, from https://www.statista.com/statistics/273476/percentage-of-us-population-with-a-social-network-profile/
- Suara.Com. (n.d.). Ini Pendapat Menkes Nila Soal Gerakan Antivaksin - Health - Retrieved September 4, 2018, from https://www. suara.com/health/2018/01/12/183000/ini-pendapat-menkes-nila-soal-gerakan-antivaksin
- Sunstein, C. R., & Vermeule, A. (2009a). Conspiracy Theories: Causes and Cures. Journal of Political Philosophy, 17(2), 202–227.
- Swami, V., Coles, R., Stieger, S., Pietschnig, J., Furnham, A., Rehim, S., & Voracek, M. (2011). Conspiracist Ideation in Britain and Austria: Evidence of a Monological Belief System and Associations between Individual Psychological Differences and Real-world and Fictitious Conspiracy Theories. *British Journal of Psychology*, 102(3), 443-463.
- Swami, V., & Furnham, A. (2014). 12 Political Paranoia and Conspiracy Theories. *Power, Politics, and Paranoia: Why People Are Suspicious of Their Leaders*, 218.
- Tandatangani Petisi. (n.d.). Retrieved September 4, 2018, from https:// www.change.org/p/menteri-kesehatan-republik-indonesia-menteri-kesehatan-ambil-tindakan-untuk-grup-antivaksin
- Tanya ASI For Thinker Parents (Gentle Parenting). (n.d.). Retrieved September 4, 2018, from https://www.facebook.com/groups/ TANYAASI4THINHERPARENTS/about/
- Teori Konspirasi-YouTube. (n.d.). Retrieved November 21, 2018, from https://www.youtube.com/results?search_query=teori+konspirasi

- TigerDan925. (n.d.). Flat Earth Liars Exposed. MAP. Antarctic isn't the outer perimeter. Retrieved September 4, 2018, from https:// www.youtube.com/watch?v=yWKCnoKM_Bl&feature=youtu.be
- Tourist Guy. (n.d.). Retrieved September 4, 2018, from http://hoaxes.org/ photo_database/image/tourist_guy
- UN Global Pulse. (2015). Understanding Immunisation Awareness and Sentiment Through Social and Mainstream Media (Global Pulse Project Series).
- UNICEF. (2013). Tracking Anti Vaccination Sentiment in Eastern European Social Media Networks. UNICEF, New York.
- Update Petisi · Kemenangan Awal! · Change.org. (n.d.). Retrieved September 4, 2018, from https://www.change.org/p/menteri-kesehatan-republik-indonesia-menteri-kesehatan-ambil-tindakan-untuk-grup-antivaksin/u/22160637
- USNews. (n.d.-a). Anti-Vaccine Movements Not Unique to the U.S. Retrieved from http://www.usnews.com/news/articles/2015/02/18/ anti-vaccine-movements-not-just-a-us-problem
- Van Prooijen, J.W. (2011). Suspicions of injustice: The sense-making function of belief in conspiracy theories. In *Justice and Conflicts* (pp. 121–132). Springer.
- _____& Jostmann, N. B. (2013). Belief in Conspiracy Theories: The Influence of Uncertainty and Perceived Morality. *European Journal of Social Psychology*, 43(1), 109-115.
- Wang, X., Yu, C., & Wei, Y. (2012). Social Media Peer Communication and Impacts on Purchase Intentions: A Consumer Socialization Framework. *Journal of Interactive Marketing*, 26(4), 198-208.
- WatchMojo.com. (n.d.). Another Top 10 Conspiracy Theories of All Time. Retrieved September 4, 2018, from https://www.youtube.com/ watch?v=Y9ebAMzt-oA
- Weiser, E. B. (2001). The Functions of Internet Use and Their Social and Psychological Consequences. *CyberPsychology & Behavior*, 4(6), 723-743.
- West, H. G., & Sanders, T. (2003). Transparency and Conspiracy: Ethnographies of Suspicion in the New World Order. Durham, NC: Duke University Press.
- Whitten, S. (2016, January 28). Trump Retweets Conspiracy Theory on Twitter, Gets Slammed by Al-Waleed. Retrieved September 4, 2018, from https://www.cnbc.com/2016/01/28/trump-retweetsconspiracy-theory-on-twitter-gets-slammed-by-al-waleed.html
- Wood, M. (2013). Has the Internet Been Good for Conspiracy Theorising. *PsyPAG Quarterly*, 88, 31–34.
- Wood, M. J., Douglas, K. M., & Sutton, R. M. (2012). Dead and Alive: Beliefs in Contradictory Conspiracy Theories. *Social Psychological and Personality Science*, 3(6), 767-773.
- World Internet Users Statistics and 2018 World Population Stats. (n.d.). Retrieved September 4, 2018, from https://www.internetworldstats.com/stats.htm
- YouTube. (n.d.-b). Press YouTube. Retrieved September 4, 2018, from https://www.youtube.com/intl/en-GB/yt/about/press/
- Zonis, M., & Joseph, C. M. (1994). Conspiracy Thinking in The Middle East. *Political Psychology*, 443–459.