

# Anti- RUMOUR

## Fake News, Conspiracy Theories, and How to Spot Them

### The Anti-Rumour Guidebook



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## INTRODUCTION

Conspiracy theories, the belief that certain events don't happen by coincidence and are secretly manipulated behind the scenes by powerful elites, exist in all modern societies ([COST, 2020](#)). Across history, conspiracy theories have been closely associated with different historical periods and political events, including witch hunts, propaganda campaigns, revolutions and genocides ([Douglas et al., 2019](#)). Many terrorists and perpetrators of criminal activities have been described as keen supporters of conspiracy theories, yet conspiracy theories are a global phenomenon that affects almost every field of human activity ([European Commission, 2021](#)). Periods of crisis, such as the outbreak of the COVID-19 pandemic, act as catalysts for the spread of conspiracy theories and fake news offering simple explanations and quick solutions to complex issues ([European Commission, 2021](#)). Their ability to provide simple solutions and avoid complexities, allows conspiracy theories to flourish in different sectors ranging in science, health, the environment, immigration, international relations and other political issues ([Douglas et al., 2019](#)).

Anti-Rumour will tackle fake news and conspiracy theories related to two particular topics; a) the environment and b) social inclusion. The overwhelming percentage of scientists have alerted the public and policy makers that the effects of climate change will have deleterious consequences for the environment as well as for humankind ([Uscinski et al., 2017](#)). Yet, policies intended to curb carbon emissions and mitigate the effects of climate change are being notably rejected for multiple reasons. For example, industries that don't want to incur additional costs (or lose part of their income) due to the adaptation of green policies, are often promoting fake news blaming scientists for manipulating or using fake data regarding climate change ([Uscinski et al., 2017](#)). This latter category of opposers has led to the development of a conspiracy-based climate-related belief known as climate 'skepticism' ([Uscinski et al., 2017](#)).

The field of social inclusion, on the other hand, is a multidimensional topic that includes various themes. According to the World Bank ([2021](#)), social inclusion is the process that governs the participation of individuals and groups within a society. Fake news and disinformation, however, are constantly being used to manipulate people's beliefs and attitudes towards migrants and refugees and to **spread racism and xenophobia**.

This guidebook aims to identify and explain the key definitions of conspiracy theories and fake news and then to analyze the psychology of conspiracizing with references to the history of conspiracy theories. It can be used as a tool for identifying and diagnosing conspiracy theories

and fake news and will provide an in-depth explanation of the characteristics of conspiracy theories, the dangers they hide for modern societies and democratic institutions as well as the main ways to address conspiracy theories and prevent their spreading. More particularly, to provide a better understanding of the concept of conspiracy theories and practical ways to promote and achieve media literacy, this guidebook includes case studies and examples of mechanisms and tools used to diagnose and spread awareness about conspiracy theories and fake news in Germany, Spain, Greece and Cyprus.



# CHAPTER 1: FAKE NEWS AND CONSPIRACY THEORIES

## Definitions of fake news



### Disinformation

Information that is false and is created with a specific intention to harm people, groups or societies



### Misinformation

Information that is false or misleading, often shared by people that do not mean harm and/or who haven't realized it is false information

Fake news is a term that is often used to refer to conspiracy theories, however, the two terms are not identical. Fake news is not a new term. It is used as an umbrella term to define a broader range of information disorders, including disinformation, misinformation and conspiracy theories ([CIVITA, 2022](#)):

In order for something to be described as fake news it must, by definition, include false information. If not, then the information would be classified as true and reliable and thus it wouldn't raise any concerns ([Reglitz, 2022](#)). To define fake news and help the process of identifying and diagnosing fake news, the European Commission has established a set of common features:

- A) Fake news contains false information.

- B) Fake news is often created with deceptive intent, although people might speak fake news without the intention to cause harm.
- C) Fake news is presented as resembling traditional news coverage, even though it is not produced in accordance to the editorial standards of news media.

Taking into consideration these three features, it is clear that fake news can take different forms, and are often covered up as genuine information misleading people and threatening to undermine democratic institutions ([Reglitz, 2022](#))

The fact that fake news is used to refer to different things makes it particularly difficult to tackle. In addition to misinformation, disinformation and conspiracy theories, the term fake news is also used to define propaganda ([Mastrine, 2019](#)). Politicians are often using fake news to promote their own political agendas ([UNESCO, 2022](#)). For example, Donald Trump was using the fake news label while serving as the president of the USA, to criticise major media organisations and reject any form of criticism against his policies ([Chervinsky, 2021](#)).

This report uses the term fake news to refer to disinformation, which includes the intention to harm and mislead people. The use misinformation is used in addition to fake news, to show the effects of spreading false information (despite the presence of an intention to cause harm). Finally, the terms conspiracy theories and rumours are also used, as these will be defined below.

## Definition of conspiracy theories

Conspiracy theories is the belief that secret powerful forces and influential organisations are manipulating events behind the scenes, with a particular negative intent ([Butter et al., 2021](#)). Conspiracy theories start as a simple suspicion, trying to identify who is benefiting from specific events and thus identifying the conspirators behind each event. Once established, conspiracy theories can grow quickly, manipulating all evidence to fit into and support the conspiracy. They are notoriously difficult to refute as those that attempt to do so are often accused of being the 'enemy' and a supporter of the conspiracy ([Butter et al., 2021](#)).

When trying to identify conspiracy theories, it is always important to **distinguish between real conspiracies and conspiracy theories**. Real conspiracies are plots and schemes whose existence has been established beyond reasonable doubt ([COMPACT, 2020](#)). Real conspiracies would also have a clear goal, often linked to a specific political aim (i.e., a coup d'état, or an assassination).

People tend to believe in conspiracy theories for many different reasons as they provide a simple explanation of complicated events and situations which are often difficult to understand. In addition, belonging to a group of believers is often portrayed as a unique opportunity to belong to a group of people that know the 'truth' about the world. Conspirators manipulate events and situations offering a false sense of control and agency.

The common features of conspiracy theories are ([Butter et al., 2021](#)):

## The common features of conspiracy theories :

(Butter et al., 2021)



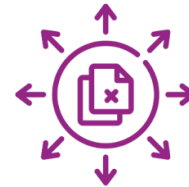
1. An alleged, secret plot.



2. A group of conspirators.



3. 'Evidence' that supports the conspiracy theory.



4. Nothing happens by accident, and there are no coincidences; everything is somehow connected.



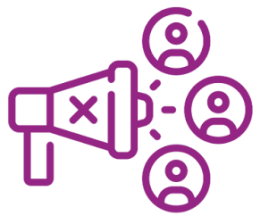
5. Dividing the world into two groups of "bad" and "good".



6. Scapegoating individuals and groups.

## Definition of rumours

Rumours are an example of misinformation, which includes false or inaccurate information without a deliberate and malicious intention ([UNHCR, 2022](#)). Rumours are defined as information or stories that are passed from one person to another without any prove they are real ([Britannica, n.d.](#)). Other definitions related to the topic of “Fake News, Conspiracy Theories, and how to spot them” include ([HCC Libraries, n.d.](#)):



### Propaganda

Information or rumours that are deliberately spread to help or harm a person, group or movement. This type of information is often spread to support an ideology.



### Clickbait

Internet content, specifically created with the intention to encourage users to enter websites which are often considered of low quality.



### Hoax

Information created with the intention to deceive.



### Parody

Satirical and humorous content.

## How do fake news and conspiracy theories affect democracy?

A study conducted during the 2016 US elections ([Reglitz, 2022](#)), showed that only a minority of voters actually believed fake news stories. This was also evident on social media, with only a limited number of users sharing fake news related to the elections on Facebook and Twitter.

Yet, polls and surveys conducted by the Hill and the Pew Research Center ([2019](#)) in the USA, expressed that 88% of American citizens are concerned about the implications of fake news in their country. Similarly, a European study conducted by the European Commission showed that although the numbers of people engaging with fake news and conspiracy theories is low, more than 85% of European citizens consider fake news to be a problem in their country ([Reglitz, 2022](#)). The fact that fake news are embraced by a considerably minor percentage of individuals, while at the same time, the majority of people believe that fake news and conspiracy theories constitute a problem in their country creates confusion among researchers and institutions as to the extent and the manner in which fake news threatens the operations and values of modern democracies ([Reglitz, 2022](#)). The problem seems to lie in people's perceptions about the spread of fake news and conspiracy theories rather than in their actual content. As argued by Reglitz ([2022](#)), in politics perceptions are as important as facts and they have the power to influence the opinion of people and even affect, to a certain degree, their actions. It is also possible that even if people say they don't believe fake news, this information could still have (unconscious) consequences on their perceptions on various topics. As a result, the existence of fake news and conspiracy theories affects democracies even if their content is not believed because they can challenge citizens' epistemic trust in each other's political views and judgment as well as affect people's trust in their government ([Reglitz, 2022](#)).

The most widespread concern about fake news is that they are indeed believed by those who interact with it, and can therefore affect their actions within a democratic constitution ([Reglitz, 2022](#)). One could argue that in practice, fake news affects the processes and values of democratic institutions regardless of whether its content is believed or not. The increasing use of the internet and social media platforms has provided new means for conspirators to share fake news and conspiracy theories and they are able to reach a wider target audience. Online fake news has been identified by major democratic institutions, such as European bodies and academic institutions, as a major problem for modern societies despite the empirical studies that show that only a considerably small percentage of people are convinced by their fake content ([Reglitz, 2022](#)). This is because people might not believe the fake news themselves, but they

are convinced that fake news is believed by other people, causing the loss of trust amongst each other; a phenomenon that is known as the third-person effect, in which people generally believe others to be more vulnerable to media effects than themselves ([Reglitz, 2022](#)).

More particularly, conspirators are using fake news to promote conspiracy theories with the aim of dividing and obfuscating public opinion ([Stella, 2022](#)). The existence of this type of information would confuse people, and will be believed by those who search for simple explanations for complicated events. More information about the dangers of spreading fake news and conspiracy theories and how they affect democratic institutions can be found in Chapter

## Fake news and the environment



The most known case of fake news regarding the environment is the claim of climate scepticism that climate change is not real, and that climate scientists are lying. Most sceptics believe that climate change is merely part of a large natural cycle and that the data presented has been manipulated by scientists ([Lim, 2022](#)). Yet, there is a consensus from the scientific community that climate change is being caused by people, which makes fake news related to the environment a puzzling issue to counter ([Lim, 2022](#)).

According to Professor Rogerson, a researcher at the University of Hull, the main reason behind the sizeable number of sceptics is that the majority of the general public obtain their information on the environment and climate change from mainstream media outlets rather than from scientific papers ([The Conversation, 2019](#)). In addition, mainstream media outlets often refrain from mentioning climate change and the imminent threats it imposes to human life when reporting on extreme weather conditions and natural disasters (Lim, 2022). The proliferation of disinformation regarding climate change on social media platforms has made it extremely difficult to distinguish between facts and fiction ([McKie, 2021](#)). More particularly, research involving more than 500 Twitter users showed that more than 55% of Twitter posts on environmental topics shared the belief that climate change is not happening or that it is caused by reasons unrelated to human activities ([Rawi et al., 2021](#)). Similarly, more than 7 thousand

posts were found on Facebook, in 2021, describing climate change as a 'scam' and 'hysteria' ([BBC, 2021](#)).



## Fake news and social inclusion

Communication amongst people is the key expression, which offers an understanding of how people think, how they exchange information and ideas and how they interact with each other within a community ([WACC, 2019](#)). Fake news and intentionally misleading information have been used for many years to intensify social conflict ([CITS, 2017](#)). False stories and untrue information aiming to manipulate people's perceptions of reality could spark mistrust amongst people and communities resulting in incivility, racist incidents, and violence ([CITS, 2017](#)).

Recent years have seen a rise of disinformation about migration across Europe. Manipulation of statistics about the numbers of refugee arrivals and disinformation about the economic impact of migration are only some of the disinformation campaigns promoted to influence public opinion, often with serious political implications ([EPC, 2020](#)). Refugees are often portrayed as violent and disrespectful which often taps on people's pre-existing convictions and fears, leading to an increase in racism and xenophobia in European communities ([Neidhardt and Butcher, 2022](#)).

Research conducted by the European Policy Centre ([2020](#)), identified more than 1400 articles (from German, Italian and Spanish media outlets) containing fake news on migrants and refugees ([Neidhardt and Butcher, 2022](#)). The study used an online analysis tool that allowed the authors to identify the articles that received the greatest attention on social media platforms, namely Facebook and Twitter ([Neidhardt and Butcher, 2022](#)). By identifying the existing disinformation strategies in the field of migration and social inclusion, the European Policy Centre produced a **set of key recommendations on identifying and diagnosing fake news on migration**, as well as on promoting new alternative narratives on integration and inclusion ([EPC, 2020](#)):

- Production of **simple and short pieces of information**, resonating with the audience's past experiences but without amplifying their anxieties and fears. These pieces of information would aim to reframe the political debate on migration and inclusion and promote fresh narratives for migrants and refugees.
- **Restoring the truth.** Identifying and debunking fake information using the same communication channels as the target audience (i.e., social media platforms).
- **Targeting the audience.** The information should include 'entry-points' where the readers are able to find common ground within the information (i.e., common values, similar concerns).

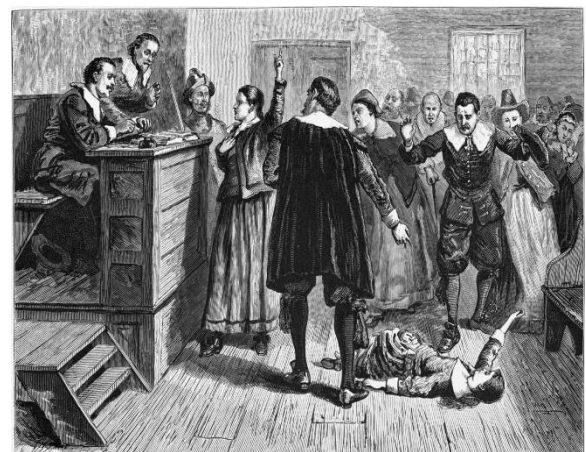
## CHAPTER 2: SPREADING RUMOURS THROUGHOUT HISTORY

### The main rumours from the medieval ages to the 21<sup>st</sup> century

The intention to spread rumours and deceive people is as old as humankind, and fake news have been shared by various actors throughout history ([Greifeneder, 2021](#)). The phenomenon of fake news began as early as news started to circulate widely, in 1439 when Johannes Gutenberg invented the printing press ([Greifeneder, 2021](#)). From the medieval ages to the modern age, fake news have played a major role in various fields ranging from the political scene to religion, economy, and even science. Dictatorships, for example, are using fake news and propaganda via independent media, to promote their ideology and convince the public to support them ([Guriev and Treisman, 2015](#)). The digital era, as mentioned below (in 'Media rumours and the digital era') has offered new ways which allow for the even quicker spread of fake news in contemporary societies.

These are some examples of rumours and fake news throughout history:

- The fake capture of Kadesh (1247 BC):** In 1247 BC, Ramses II claimed that he captured the Egyptian city of Kadesh. The fake news were spread by word of mouth, and even via wall paintings. Ramses II recognised the importance of diplomacy and exhaustive relations campaigns in mitigating any military shortcoming, so even when he had to withdraw from Kadesh, he ordered the creation of murals depicting the fake news that his army defeated the aggressors (Rattini, 2019).
- The Salem Witch Trials in 1692 BC:** The disinformation regarding witchcraft in the Salem Village, Massachusetts, began in the spring of 1692 after a group of girls claimed to be possessed by the devil and accused several women to be involved with witchcraft. The rumours spread by mouth all over the village and led to the creation of a special court that convicted 19 people to death penalties for being witches. The first



convicted witch was Bridget Bishop. This fake news led to paranoia in the village of Salem with more than 150 women, men and children accused of being involved with witchcraft (History, 2021).

- **The Earthquake of Lisbon, in 1755 BC:** On the 1<sup>st</sup> of November 1755, an earthquake broke out in the city of Lisbon, which led to an estimation of 30,000 to 60,000 deaths and left the city lay in ruins. The earthquake destroyed almost all the churches and it brought wide-ranging effects on the society and culture in Europe. On the one hand, theologians and religious authorities exploited the situation and declared that the earthquake was a punishment by God for the sins of the people. On the other hand, philosophers and naturalists proposed naturalistic explanations for the earthquake, aiming to tackle the disinformation spread by religious authority. It was the first time that an earthquake was regarded widely as a natural phenomenon, and the incident was widely discussed by philosophers of the Enlightenment period (Bressan, 2011).



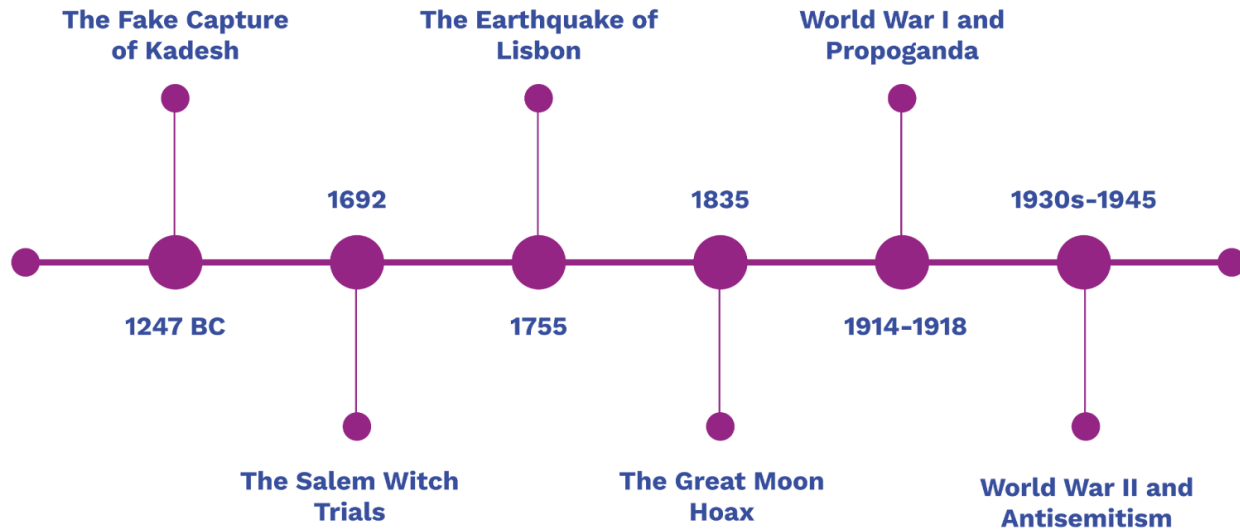
- **The Great Moon Hoax (1835 BC):** On the 25<sup>th</sup> of August 1835, the New York Sun published the first in a series of six articles, describing the alleged discovery of life on the moon. The articles referred to the discoveries of a fictional character and described the moon as a place full of amethyst crystals, rivers and lush vegetation. The articles were written by Richard Adams Locke, a Sun reporter who wrote them as satire. Yet, people were completely taken by the story and failed to recognise it as satire. The Sun admitted that the articles had been a hoax on the 6<sup>th</sup> of September 1835 (History, 2009).



- **World War One and Propaganda (1914-1918):** Propaganda was employed on a global scale during World War One as this was the first time in history that a total war broke out. Propaganda was deployed on all fronts; to convince people to join the war, to hide the atrocities of the war, to spread hate and shape international opinion and even to enlist the active support of neutral countries (British Library, n.d.).



- Second World War and Antisemitism:** During the Second World War, propaganda was one of the main tools used by the Nazis to form the beliefs and attitudes of the German public. The rhetoric of the “German national community” began from the mid-1930s and eventually led to the Nazis’ rise to power in 1933 ([Facing History & Ourselves, 2022](#)).



## The psychology of conspiracizing

Rumours and fake news are spread for a number of reasons, often with the intention of gaining financial benefits or for ideological beliefs and other times simply to satirize. **Satire** is designed with a humorous character and its objective is **not to deceive people**, in contrast to conspiracy theories ([Greifeneder, 2021](#)). Recent years have seen an increasing number of researchers attempting to identify the main reasons behind believing and spreading rumours. Although there is not a definite answer to the question why people believe in fake news, this chapter will analyse some of the most common theories behind the psychology of conspiracizing and spreading fake news.

People often tend to spread rumours without having the intention to mislead, because they are unaware that the information is inaccurate. As argued by Greifeneder ([2021](#)), it is easier for people to spread a piece of information once they believe in it; and people tend to believe simple information more easily. In other words, people seek to understand the world and the cause of different events. Conspiracy theories are then offering a simple explanation and they make people feel safe and secure ([Douglas et al., 2017](#)).

Another reason that leads people into believing conspiracy theories, is the lack of trust in traditional information sources, particularly after a crisis. As stated by DiFonzo, a psychology professor and researcher, when there is a great deal of distrust to official governments people tend to believe rumours more easily and to a bigger extend ([Sebastian, 2020](#)).

Conspiracy theories, in addition, fulfil people's desire to belong to a social group. As researchers argue, conspiracy theories tend to valorize the self by blaming others for all negative outcomes ([Douglas et al., 2017](#)).

## The effects of rumours in society



Rumours constitute unverified information, as defined in Chapter 1, which does not necessarily have the intention to harm. Their effects in modern societies have been studied by various scientific fields, including psychologists, sociologists, and political analysts ([Zheltukhina et al., 2016](#)). One of the primary concerns of spreading rumours in modern society is linked with the development of identities ([Zheltukhina et al., 2016](#)). Rumours have the power to form identities on both an individual and collective level. As rumours are spreading, individuals believing the conspiracy theories end up forming identical beliefs with each other, leading to mass believers of the conspiracies. Whether rumours are believed or not is not relevant for the formation of an identity as individuals and groups can form various identities from the spreading of rumours; the identity of the believer, the identity of the critical, the identity of the non-believer, etc.

The opinions and the emotions of an individual or groups of people are also affected by the spread of rumours. As argued by Dr. Bhattacharjee, rumours spread more easily and widely during unstable periods of for example war, riot, crisis or elections ([Bhattacharjee, 2017](#)). When a piece of information is spread to a wide audience, people tend to believe it even if they know it is unreliable. This is due to repetition and discussion of rumours without verifying the information. By accepting the rumour, an individual will form their opinion based on that rumour and they will eventually let their emotions over a topic grow based on the spreading of fake news and rumours.

## Media rumours and the digital era

The rise of technology imposes new concerns regarding the extend and effects of the spread of rumours. The use of the internet, one of the main characteristics of modern societies, has been widely seen as a force for good, supporting democratic institutions and allowing people to stay informed about a variety of topics ([Butcher, 2019](#)). One example of how internet use can benefit democracies is the role of social media platforms in the Occupy Movements, which demonstrated the ability of social media platforms to give people a strong voice that enables them to bring real change ([Butcher, 2019](#)). The Occupy Movements was a worldwide movement that took place between 2011 and 2012, to express opposition to social and economic inequalities.

Yet, the internet and the increasing use of technology is also imposing dangers to modern democracies. The online disinformation campaigns that took place during Brexit, the 2016 US elections and, more recently, during the global Covid-19 pandemic are just a few examples of how social media and the internet can contribute to the spread of rumours and fake news. One of the main dangers regarding rumours and fake news in the digital era is that it is **impossible to stop them from spreading** ([Greifeneder, 2021](#)). Some of the main features of the digital era, which allow the easier spread of rumours and fake news include:

- The lack of barriers when it comes to sharing rumours and fake news online. Websites and social media accounts spreading rumours can be easily set up and potentially monetized via advertising (i.e., through common clickbait).
- Costs associated with sharing rumours on social media are very small.

In addition, there has been a **decline in public trust and confidence in mainstream media** while at the same time there has been an **increase in the use of social media platforms**. As a result, people trust pieces of information shared on social media more easily, even if they do not have enough evidence and reliable sources for the information. Similarly, **political polarisation** has also affected the public trust in traditional news media while at the same time, political polarisation acts as a mechanism to control people's opinions increasing the likelihood of rumours and fake news being believed ([Greifeneder, 2021](#)).

Social media platforms have also offered a new space for conspiracy theories to be shared reaching an even wider number of people. One example of this phenomenon is the spread of the far-right QAnon conspiracy theories on social media. The QAnon movement is a conspiracy theory, that says that ex-USA president, Donald Trump has a secret war against elite groups of

Stan-worshippers and paedophiles within the American government, business and the media ([Wendling, 2021](#)). They have been using the internet to communicate and establish several disinformation campaigns, such as the #ReleaseTheMemo campaign, requesting from the American intelligence services to release information about imaginary secret groups and societies that control politicians and orchestrate various events around the globe ([Haimowitz, 2020](#)).

## How to deal with rumours

The best way to deal with rumours is to be aware of the possibility of becoming a victim of disinformation and as a result, be cautious, alert and sceptical before believing any piece of information that comes from a non-verified or unreliable source. There are different ways to approach and verify news, but there are some simple tips that can be easily followed. Greifeneder et al., ([2021](#)) suggest the application of the ‘five criteria tool’ for verifying information:

In Chapter 3, there is additional information about the dangers as well as tips on countering and

### Five Criteria Tool



#### 1. Compatibility

Is the information compatible with previously received information?



#### 2. Coherence

Is the piece of information internally coherent?



#### 3. Credibility

Is the source credible?



#### 4. Consensus

Do other people believe the information?



#### 5. Evidence

Is there enough supporting evidence?

preventing the spread of rumours, fake news and conspiracy theories.

## CHAPTER 3: HOW TO IDENTIFY AND DIAGNOSE CONSPIRACY THEORIES

### Why do conspiracy theories prevail?

As defined in Chapter 1, conspiracy theories are the belief that some secret but powerful and influential organisation is responsible for various events and phenomena. This belief rejects the possibility of coincidence, and it argues that all events are secretly manipulated behind the scenes by powerful organisations with negative intentions, aiming to control the globe ([European Commission, 2020](#)).

When studying conspiracy theories and the reasoning behind their spreading, it is important to distinguish between conspiracy theories and fake news. These two terms are often used as identical in public discussion but there are important differences between them. Fake news is more temporary, it is the sharing of false information about a specific event or phenomenon. Conspiracy theories have a clear structure, they identify a secret plot and they manipulate different events and phenomena to fit this plot. In addition, conspiracy theories in contrast to fake news tend to be long-lasting often lasting for several decades, like the international Jewish conspiracy claiming that a global Jewish circle conspires for world domination ([Facing History and Ourselves, 2020](#)). Unsurprisingly, there is a conspiracy theory about the origins of the term 'conspiracy theory', which claims that the term was invented by the CIA in an attempt to disqualify criticism over the official statements on the assassination of President Kennedy. In reality, however, the term 'conspiracy theory' was first used in the 1960s by the philosopher of science Karl Popper and it has ever since been increasingly studied by various fields ([COMPACT, 2020](#)).

Psychological research, more particularly, has shed light on the reasons behind people believing and promoting conspiracy theories. In the past, believing conspiracy theories was intricately linked with psychological and mental health issues, such as paranoia ([COMPACT, 2020](#)). Psychological research has shown that conspiracy theory believers are persons who feel powerless and have trouble accepting uncertainty in their lives ([COMPACT, 2020](#)). Although there are no major differences between male and female conspiracy supporters, the research suggests that trust in conspiracy theories decreases with the level of education ([COMPACT, 2020](#)).

Although there is no clear consensus on why people believe in conspiracy theories, most researchers in this field have concluded on some of the key reasons for believing conspiracies ([COMPACT, 2020](#)):

- Conspiracy theories **offer a simplistic understanding of political and social developments**, excluding cases of coincidence in political, social, economic and scientific developments.
- Conspiracy theories **put the blame on specific people**; thus, removing the responsibilities of the believers from the socio-economic developments of their communities.
- Conspiracy theories allow believers to **distinguish themselves from the mass**, giving them a space to feel unique, 'they are the ones who know what is really going on'.
- Conspiracy theories are a way to **rebel against authority** as they are often based on the criticism and disconnect of how public institutions function.
- Conspiracy theories accommodate a feeling (or need) of **belonging to a certain group** of like-minded people



#### Check the author

Who is the writer? Why are they writing the specific piece of information?



#### Check the source

Is the information coming from a reliable and reputable source?



#### Check the tone & style of the text

Is the writer using a balanced and fair tone or is it sensationalist and one-dimensional?

## How to identify conspiracy theories

The European Commission in cooperation with UNESCO ([2020](#)) have created a series of information campaigns on identifying and diagnosing conspiracy theories and fake news. To check if a piece of information is a conspiracy theory, the European Commission suggests to:

1. **Check the author:** Who is the writer? Why are they writing the specific piece of information?
2. **Check the source:** Is the information coming from a reliable and reputable source?
3. **Check the tone and style of the text:** Is the writer using a balanced and fair tone or is it sensationalist and one-dimensional?

In order to evaluate information, it is important to be aware of the goals and aims of conspiracy theories. Conspiracy theories **create the profile of an ‘enemy’** (based on a real or imagined threat), they **polarise believers** and **fuel extremism based on certain beliefs**. As a result, conspiracy theories pose a threat to public and democratic institutions by spreading mistrust amongst people and towards the scientific and medical community ([European Commission, 2020](#)).

For additional information on the psychology of conspiracizing and the reasons behind falling for conspiracy theories, refer to Chapter 2.

## The danger of conspiracy theories

The outbreak of the global COVID-19 pandemic in 2019 brought to the spotlight the powerful impact of conspiracy theories on the lives of people ([Jolley et al., 2022](#)). However, the consequences of conspiracy theories span far beyond health-related issues. Jolley et al. ([2022](#)) argue that conspiracy beliefs could mobilise citizens in democratic societies in ways that are detrimental to modern societies.

Even if people do not believe in conspiracy theories, conspiracies could still cause damage because the actions of most people are not solely based on their beliefs but rather on their feelings and experiences ([The Conversation, 2022](#)). As a result, the creators of conspiracy theories try to influence how people feel about certain things based on their experiences, rather than directly influencing their way of thinking ([The Conversation, 2022](#)). The real threat behind conspiracy theories is that they lead to confusion and mistrust between people so even if individuals do not believe in them they have the perception that others are believers (Reglitz,

2022). For example, during the vaccination campaigns for COVID-19 the exposure of people to anti-vaccine material fostered a feeling of unease and hesitancy. According to data collected from different European countries, even people who got the first dose of the vaccine felt hesitant to complete the booster doses or to vaccinate their children ([Jolley et al., 2022](#)). Overall, the anti-vaccination campaigns were more influential amongst people who shared negative emotions toward vaccines in general ([The Conversation, 2022](#)).

The dangers and consequences of conspiracy theories are more widespread in contemporary societies due to the rapid increase in social media platforms and their use by most people on a daily basis. During the COVID-19 pandemic, TikTok became the new social media trend amongst teens, offering a new channel for spreading fake news and conspiracy theories ([Barnett, 2020](#)). The main reason behind the success of spreading conspiracy theories on TikTok is the fact that the platform is based on repetition, sharing similar pieces of information on a repeated basis ([Barnett, 2020](#)). According to a New York Times report, the #Pizzagate (a fake story on trafficking claims and Clinton's alleged participation) was shared more than 82 million times ([Barnett, 2020](#)).

## Countering conspiracy theories

Although many conspiracy theories are quite harmless, there are dangerous conspiracy theories that can encourage political apathy and fuel populism. It is therefore important to pay attention to the context of conspiracy theories in order to counter them. Conspiracy theories that are dangerous are problematic in different ways as they often **aim towards polarization and violence, or challenge scientific and medical knowledge** ([COMPACT, 2020](#)).

As argued by the COST Action research network, a European network of researchers studying conspiracy theories, countering conspiracy theories is a very challenging process and believers of conspiracy theories are deeply convinced of their beliefs. As already explained conspiracy theories are not supported by real evidence, instead they use evidential information and manipulate events and phenomena to fit them around the conspiracy and support their objectives. Furthermore, they tend to divide the world into the good (supporters of the conspiracy theory) and the bad (conspirators who plot events to manipulate the whole world) ([COMPACT, 2020](#)).

Conspiracy theories are extremely challenging to counter because they intervene with various aspects of people's lives, and as a result, there is no common strategy to approach people prone to conspiracy theories. In addition, providing additional knowledge on specific topics is not

always a successful way to counter conspiracies as in most cases the conspiracy theories are developed due to the general lack/conflicting information available on certain topics. According to the Comparative Analysis of Conspiracy Theories ([COMPACT, 2020](#)), the best strategies to deal with conspiracies are:

- A. Recognising the political aspect of conspiracy theories – populism.
- B. Containing the spread of conspiracy theories: this is particularly challenging in contemporary societies due to the rapid increase in the use of social media. Social media has created a network where information can reach as many consumers as mainstream TV and print media.
- C. Inoculating against conspiracy theories: this step aims to warn people of conspiracy theories before they actually encounter them.
- D. Protecting the public against conspiracy theories: (online and physical) campaigns on protection from conspiracy theories could include activities which empower people to feel part of a group and have a sense of control over their own opinion, activities that help and promote critical thinking, workshops on researching and investigating information etc.
- E. Debunking conspiracy theories: this step is an attempt to provide the real facts, and identify the reasons behind the conspiracies in order to help believer distance themselves from the conspiracy theories.
- F. Look for deradicalisation programmes: if the strategies for debunking conspiracy theories fail, then a look into deradicalisation programmes could help people distance themselves from the drivers for believing the conspiracies. Conspiracies are a strategy for political extremism, and as a result researching for deradicalization could provide some insights into how to combat conspiracies amongst hard-to-reach and committed audiences.

Nevertheless, there are some simple steps, which could help the process of countering conspiracy theories, particularly those that spread online ([European Commission, 2020](#)). The European Commission suggests commenting with verified links and information, directly on the posts that spread conspiracy theories. This might not change the mind of the believers, but it will raise concerns and potentially alert new readers about the false information in the conspiracy theory. The European Commission also suggests to contact the authors directly or managers of websites that share fake news and conspiracy theories, to share the verified and true

information with them and request corrections to be made. This could also take place for newspaper outlets made available in print format and news media, by directly contacting the editorial board or the writer.

## CHAPTER 4: WHY DO WE NEED MEDIA LITERACY?

### Definition of media literacy

Media literacy is defined by the Center for Media Literacy as a communication approach that provides a framework to access, analyse, evaluate, create, and participate with messages in a variety of forms, ranging from print to videos and internet use. Media literacy provides an understanding of the role of social media in modern society and explains the essential skills of inquiry and self-expression that are necessary for citizens in contemporary democracies ([CML, n.d.](#)).

Media literacy is an umbrella term that encompasses a variety of approaches that help the development of critical thinking skills around all types of media - online and physical, and build an understanding of how information on media can shape a society, including culture and norms ([Media Literacy Now, n.d.](#)). According to the Council of Europe, media literacy offers the main tools for empowering people, communities, and nations to participate in and contribute to global knowledge societies ([Council of Europe, 2022](#)).

In a digital era where disinformation and conspiracy theories prevail, it is of critical importance for people to be able to develop cognitive, technical, and social skills and competencies that would help them to effectively assess and critically analyse media content so as to make informed decisions, avoid fake news and to communicate effectively with each other ([Council of Europe, 2022](#)). DigComp's technical definition of media literacy involves the following key elements ([Vuorikari et al., 2022](#)):

- A) The ability to browse, search and filter data, information, and digital content.
- B) The process of evaluating data, information, and digital content.
- C) The ability of managing data, information, and digital content.

Based on this definition, a media literate person would be able to articulate information needs, research for information and would have the ability to critically assess the credibility and reliability of sources of data, and evaluate digital content more easily ([Vuorikari et al., 2022](#)).

### The importance of media literacy

Media literacy helps people to engage more fully and actively with the modern media world, becoming well-informed and active citizens ([European Digital Media Observatory, n.d.](#)).

Through media literacy European citizens have the chance to understand and participate in democratic and cultural activities more easily ([CEDEFOP, 2009](#)).

The power of media literacy education to encourage critical thinking transforms media literacy into a **crucial tool in the fight against disinformation** ([European Digital Media Observatory, n.d.](#)). Continued media literacy education could increase public awareness about fake news, improving people's ability to navigate online, assessing, and evaluating information, and communicating using online platforms ([European Digital Media Observatory, n.d.](#)). A survey conducted by Ipsos Mori ([2021](#)) showed that only 9% of Europeans had taken part in media literacy trainings on the use of online tools to distinguish true from false information ([Archer, 2021](#)). In the same survey, more than 58% of Europeans stated their interest in learning more about media literacy and online tools that can help them realise and prevent the spread of disinformation and fake news ([Archer, 2021](#)).

The successful implementation of media literacy training as a tool to tackle fake news should move further from simply distinguishing true information from fake news and disinformation and focus on **developing a deep understanding of the history of fake news, the reasons behind people falling for them as well as the steps to counter them** ([Mason et al., 2018](#)). Chapters 2 and 3 in this guidebook offer insights into the topics that could be further analysed and explored in media literacy trainings.

Yet, its value in tackling disinformation should not be seen in isolation. Media literacy is also a useful tool for technology training, providing a better understanding of digital tools and online platforms ([European Digital Media Observatory, n.d.](#)). As a result, media literacy education should be treated as a process of continuous learning where members of democratic societies can sharpen a variety of skills, ranging from critical thinking and soft skills to more advanced technical abilities. This could in turn enhance active citizenship, democratic participation, and employability opportunities in contemporary societies ([Wicks, 2021](#))

# MEDIA LITERACY

## NAVIGATING ONLINE SOCIAL MEDIA PLATFORMS



### 1 IDENTIFY THE SCOPE

Why do most people use social media? Is the specific social media platform used for informative reasons?



### 2 IDENTIFY THE KEY TOPIC

What is the main topic of interest? Is the information targeting a specific group of people? Does it have an approach that promotes diversity?



### 3 AVOID EMOTIONAL INTERVENTIONS

Try to remain objective when reading a piece of information. Does the content refer to specific emotions? Is it objective overall?

### 4 FILTER THE SOURCE OF INFORMATION

Can you find the same information in other sources? Does it have a reference list? Is the topic studied from an academic and scientific approach?



## Media literacy in the digital era

Although media continue to constitute a main source of information for many European citizens, the increasing use of the internet, social media platforms and digital products is rapidly changing media consumption ([COM, 2017](#)). In a world where technology and online media forms are prevailing, media literacy becomes even more important as it offers people the necessary skills to navigate and assess the reliability of online sources of information.

The use of online social media platforms as new domains for the distribution of news and information has led to another challenge in the process of analysing information. Facts and opinions are closely connected with each other, and they both affect how people understand and interpret information. Facts are the pieces of information upon which people form their opinion on different topics ([COM, 2017](#)). On their own, facts do not include a form of interpretation. Yet, the increasing use of online social media platforms as a way to share news has blurred the line between facts, interpretation of facts and opinions which are all shared as news ([COM, 2017](#)). The role of media literacy in contemporary digital society would be to enhance the capacity of the average reader to distinguish between facts and opinion when reading news online, and more particularly on social media.

## How to achieve media literacy

Media literacy is a dynamic concept that continuously evolves and adapts to the ongoing changes in the technological, social, cultural, and political factors of contemporary society ([Council of Europe, 2020](#)). The Council on Europe established in 2018 a set of guidelines aiming at the development of media literacy amongst European states ([Council of Europe, 2018](#)):



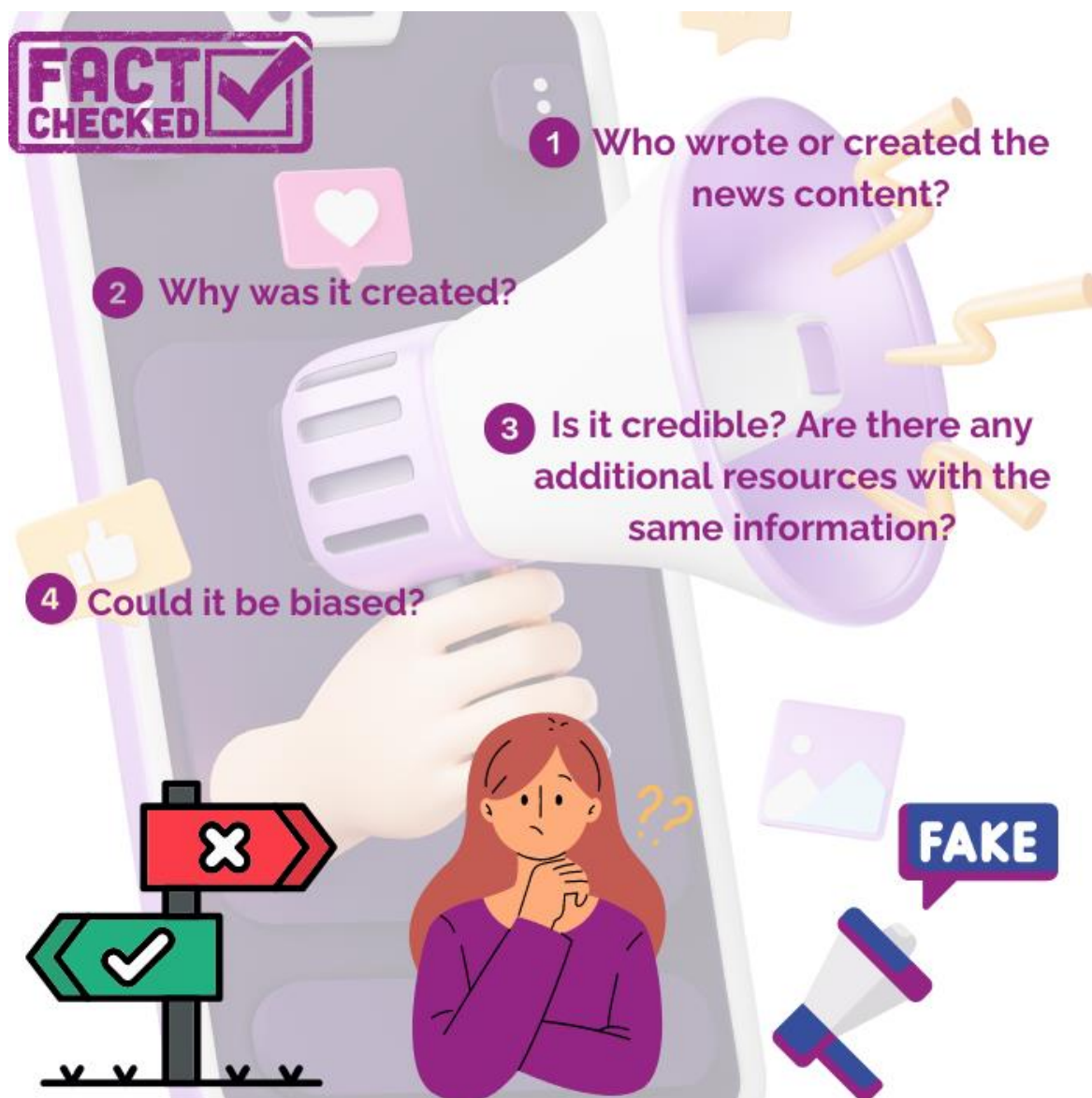
## How to achieve media literacy Guidelines from the Council of Europe, 2018:



- 1 Appropriate legislation regarding the transparency of information and news sharing.
- 2 Coordinated attempts on a national and European level to promote media literacy awareness campaigns.
- 3 Media literacy to be adapted within national and European school education programmes.
- 4 Encourage media platforms to promote media literacy through their policies and activities.
- 5 Ensuring that national authorities have the necessary resources for the promotion of media literacy.

On an individual level, media literacy is an essential communication skill which allows readers to research and assess the credibility and reliability of information ([MasterClass, 2021](#)). Whether a reader goes through a physical newspaper, watches TV, reading news online or navigates on online social media platforms, media literacy can help them comprehend the creators' objectives and distinguish facts from opinions. In addition, media literacy develops the process of critical thinking, while encouraging the responsible redistribution of information self-expression ([MasterClass, 2021](#)).

Media literacy is an ongoing process, but nevertheless, there are a few questions that could guide readers to evaluate and access pieces of information ([MasterClass, 2021](#)):



Within the context of the increasing use of social media platforms, media literacy can help individuals to realise and avoid disinformation and fake news. The main challenge in this process is not simply to distinguish true from false information, but rather to identify and explore the wider background of the given information in order to realise how this could be part of a larger disinformation campaign ([Gostein & Grossman, 2021](#)). The main steps which an individual could follow when navigating online social media platforms are ([Gostein & Grossman, 2021](#)):

**1** Identify the main scope and the way each social media platform operates.

**2** Identify the key topics of interest for the user/reader.

**3** Avoid allowing emotions intervene into the way the reader interprets information.

**4** Filter each source of information and try to identify which sources are reliable.

## Example: A practical tool for advancing media literacy

This guidebook has identified multiple innovative methodologies, digital tools, and online games which enhance the critical thinking, problem-solving, and media literacy capacities of users.

More information on these tools can be found in Chapters 5 and 6 of the guidebook.

For more information on how to become media literate, the Council of Europe has established a Toolkit on Media Literacy, which can be accessed [here](#).

Another useful Toolkit on Media and information literacy has been developed by DeutscheWelle (DW) and it can be downloaded [here](#).

## CHAPTER 5: BEST PRACTICES AND INNOVATIVE METHODOLOGIES

### How to identify best practices to prevent the spread of fake news and conspiracy theories

As already mentioned in the previous chapters, identifying and diagnosing fake news and conspiracy theories is a challenging process. There are, however, various tools and guides on identifying and diagnosing fake news. For example, the European Commission and the United Nations are some of the key democratic institutions that have produced guides on identifying fake news and conspiracy theories.

These are a few examples:

1. European Parliament, 'How to spot when news is fake', (2019): Access to the tool [here](#).
2. UNESCO, 'Journalism, fake news & disinformation: handbook for journalism education and training', (2018): Access to the handbook [here](#).
3. UNICEF, 'Countering Online Misinformation resource pack', (2020): Access to the guide [here](#).
4. Council of Europe, 'Antirumours Handbook', (2018): Access to the handbook [here](#).

### Innovative methodologies for preventing rumours

In addition to the multiple guidebooks, handbooks, and research papers on identifying, preventing, and countering the spread of rumours, fake news, and conspiracy theories there are various innovative digital tools and practices for identifying and diagnosing fake news.

A few examples of the innovative methodologies for preventing rumours include:

1. Bot Sentinel; an online platform that evaluates how trustworthy Twitter accounts are. Access the platform [here](#).
2. Checkology; a part of the News Literacy Project that offers a media literacy curriculum for students, educators and people interested in identifying and addressing conspiracy theories. Access the material [here](#).
3. Google Fact Check Tools; online tool that evaluates information based on previous comments and reviews. Access the tool [here](#).

RAND, a research organisation focusing on public policy challenges, has developed a list with more than 80 digital tools on identifying and preventing the spread of fake news. The list of the tools can be accessed [here](#).

## Best practices:

The Anti-rumour Guidebook has collected some examples of the most innovative practices for identifying and diagnosing fakes news and conspiracy theories and awareness raising campaigns in Germany, Spain, Greece, and Cyprus.

### DACH countries (Germany, Austria and Switzerland)

**Dpa Faktencheck:** An independent news platform offering objective information on political, social and economic developments helping to stop the spread of false and invalid information. The platform can be accessed [here](#).

**Correctiv:** An online platform aiming to respond to fake news and disinformation by providing reliable and trustworthy information instead. The platform can be accessed [here](#).

**Mimikama:** An online, Austrian platform debunking hoaxes and fake news from different news and social media platforms. It is very widely used in Germany as well. The platform can be accessed [here](#).

### Spain

**Anti-rumour selfie:** The Anti-rumour selfie is a campaign that took place under the Spanish 'Stop Rumours' action which aims to raise awareness about the negative consequences of rumours, stereotypes and prejudices spread on social media platforms. The campaign requested people to take a selfie and send it to the campaign organisers, accompanied by a short text on rumours, perceptions and urban legends regarding migrants and minority groups. The photos and the texts were later posted on social media platforms as part of the campaign to counter negative stereotypes, racism and xenophobia.

More information about the campaign can be found on the Facebook page of the 'Stop Rumours' action, [here](#).

### Greece

**Ellinika Hoaxes:** A non-profit organisation that aims to identify fake news distributed in Greek news media channels. It is a member of the International Fact-Checking Network and its services undergo an audit process yearly, to make sure that the quality of fact-checking services remains neutral and objective.

Website of Ellinika Hoaxes: <https://www.ellinikahoaxes.gr/>.

## Cyprus

**Fact Check Cyprus:** A group of scientists from different fields, including Philosophy, Psychology, Sociology, Physics and Medicine, which checks the reliability of news articles published from various news agencies in Cyprus.

Website of the Fact Check Cyprus: <https://factcheckcyprus.org/>.

**SuperYOUTH:** A European project which will be implemented in Cyprus, Italy, Greece and Romania aiming to develop a youth worker training programme on countering disinformation and fake news.

SuperYOUTH project: <https://superyouth.eu/>.

## CHAPTER 6: INFORMING AND EDUCATING YOUTH THROUGH GAME-BASED LEARNING

### Definition of Game-based Learning

Qian and Clark define game-based learning as the **use of games to enhance learning by involving problem-solving challenges** that provide learners and players with a sense of achievement ([Qian and Clark, 2016](#)). Game-based learning can be an innovative educational approach aiming to strengthen resilience to fake news ([Buca, 2022](#)). In modern societies, students and young people form a significant number of participants in the digital public sphere, and as a result, they are vulnerable to disinformation and propaganda as they use social media platforms as a main source of information and knowledge ([Buca, 2022](#)). Gamified approaches for countering fake news and disinformation aim to strengthen the resilience of consumers towards fake news by helping them to critically analyse news headlines and check the trustworthiness of the content of news articles ([Clever et al., 2020](#)).

### Main steps of using Game-based Learning

There are many ways to implement game-based learning approaches to educate youth in diagnosing and tackling fake news. [Faber \(2016\)](#) has shared a few key steps for implementing gamified learning to build resilience to fake news:

- **Establishing a shared experience element:** the players/users should have a common understanding of what is expected of them and have the freedom to play and explore the game on their own. In a learning environment, participants should be given a space to share their experience using the game, and explore how their experience has contributed to their ability to recognise and diagnose fake news and misinformation.
- **No intervention during the ‘playing time’:** participants should be given enough time to explore the game on their own, find ways to address any challenges they face and reach their own conclusions.
- **Highlight that the game is just one of the tools** that can be used for diagnosing and addressing fake news. It is important to use gamified approaches as a way to increase the interest of young people in identifying and diagnosing fake news, but they should also be able to research and apply their media literacy skills ‘outside’ of the game environment as well.

## The benefits and challenges of Game-based Learning

Game-based learning methodologies have many benefits and they can keep learners motivated and engaged with various topics. In addition, games can offer a simpler understanding of otherwise complicated topics and they give space to the players/users to experience specific situations on their own ([University of Toronto, 2022](#)). Research conducted by the University of Toronto ([2022](#)), proved that through the use of games the users are becoming more confident in their skills and abilities and they recognise the importance of practising their skills for further development. In addition, gamified learning increases the interest and motivation of the learners to engage with a specific topic further. More particularly, using gamification to enhance the ability of young people to diagnose and tackle fake news and misinformation could help advance their critical thinking and problem-solving competencies. In the case of diagnosing fake news, for example, the use of games could help young people advance their critical thinking and learn how to research and recognise if the information they read is trustworthy or if there is a high probability they are dealing with fake news and conspiracies.

The same research has also mentioned some of the challenges of applying gamified learning approaches with young people. One of the main challenges relates to the relationship between the game and the educational curriculum. This is more apparent in the case of applying game-based learning within schools, in which case the games must be aligned with the national context of each country. When it comes to teaching young people how to diagnose fake news, the use of games could make the learning process easier. Yet, games for diagnosing fake news might not always apply to the universal disinformation challenges faced by different countries. For example, some game storylines might be applicable only to specific countries. Nevertheless, games that aim to build the capacity of the player to research and critically assess a piece of information could enhance the skills and competencies of the player to deal with unpacking disinformation in various topics.

### Examples:

The Anti-Rumour Guidebook has collected some of the best examples of gamified approaches for diagnosing and dealing with fake news, which could help young people become more resilient to fake news and disinformation. Some of the examples which could be used by players in different countries include:

1. **Bad News**; an online tool/game that aims to help the user understand the techniques involved in disinformation. Access the game [here](#). Users can play the game in different languages, including English, German and Greek.
2. **CoronaChampion**; an online game developed by the UNDP, to spread awareness on Covid-19 and prevent the spread of misinformation and fake news regarding the outbreak of the global pandemic. Access the game [here](#). Users can play in English.
3. **Go Viral**; another online game that aims to protect the users against Covid-19 misinformation. Access the game [here](#). It can be played in different languages, including English, German and Spanish.

### DACH countries (Germany, Austria and Switzerland)

**Escape Fake**: an interactive augmented reality game, developed by the Austrian studio Polycular, aiming to raise awareness regarding fake news and improve the skills of the youth in recognising them. The game can be accessed [here](#). It can be played in both German and English.

**“Vorsicht! Giftstoffe im Handy”** (Danger: Toxins in your smartphone): an application developed by the North Rhine-Westphalia State Agency for Civil Education which enables young people to practice recognising fake news and conspiracy theories. The players of the web-based game slip into the role of a person doing an internship in the online editorial department of a fictitious daily newspaper. While reviewing the news content they come across a piece of information claiming the game can be accessed [here](#).

### Spain

**The Hoax Factory**: an online game developed by Maldita, a non-profit organisation conducting fact-checking for news information, in cooperation with Oxfam Intermon. The game aims to help the players recognise fake news and understand how to tackle them. The game can be accessed [here](#). It can be played in both Spanish and English.

**Eraser**: an online game, accompanied by a training guide, on developing resilience to fake news and misinformation. The players travel to the past, detect lies and misinformation, and try to change the future by eliminating the spread of fake news. The game can be accessed [here](#).

## Greece

**Mathe:** is a serious game that trains the players to learn how to distinguish fake news and hate speech. The players are viewing mock-ups of news (fake news or real ones) and have to distinguish if the news displayed is real or not. The game can be accessed [here](#).

**Hatebusters:** an app developed during an Erasmus KA2 project focusing on the prevention of hate speech and cyber bullying. Players are introduced in a sequence of case studies regarding hate speech and bullying, and have to choose among three possible answers. When selecting an answer, they get immediate feedback from the game on whether the answer is correct or wrong and why it is so. When the game ends, players get an assessment on how well they can handle such situations. The game can be found [here](#).

## Cyprus

**Fact Finders:** an online game developed with the aim to provide a training ground for young people to learn how to conduct research and investigation to create objective news articles. The players are given information from various sources regarding some historical events, and they will have to identify whether the information is objective or if it includes biases. The game can be accessed [here](#).

## CHAPTER 7: SPREADING DISINFORMATION THROUGH ARTIFICIAL INTELLIGENCE:

In a digitalized era, the cases of disinformation are constantly increasing. The recent rise of AI use has amplified the problem, as now it's easier to manipulate and create realistic texts and videos. When AI techniques are used to create fake content, the product is called a deepfake ([Bontridder and Pouillet, 2021](#)). Deepfakes circling in the media, especially when used maliciously, can have a massive negative societal impact. Unfortunately, they are often used to mislead individuals and cause distress. They help in the dissemination of fake news and alter the perception of reality, as well as undermine the credibility of legitimate information.

According to the Oxford English Dictionary definition, deepfake is “any of various media, esp. a video, that has been digitally manipulated to replace one person's likeness convincingly with that of another, often used maliciously to show someone doing something that he or she did not do”. ([OED, 2023](#)). Deepfakes usually have a malicious purpose and include mainly videos, images, audio and other media, that have been digitally altered to present, in a convincing way something that in reality didn't happen. Deepfakes are created by two AI algorithms working in a GAN (Generative Adversarial Network). GAN is a way to generate new data from already existing datasets. This means that GAN can analyze pictures of a specific person and then generate a new one very similar to the original analyzed picture but not the exact copy of it. It can be used to alter types of content like images and videos. The term deepfake is mainly used for audio and video content ([Bontridder and Pouillet, 2021](#)).

One effective technique to disseminate fake news through AI is **micro-targeting** ([Bontridder and Pouillet, 2021](#)). According to the definition given by TechTarget, micro-targeting (also called micro-niche targeting) “is a marketing strategy that uses consumer data and demographics to identify the interests and preferences of specific individuals or small groups to send targeted advertisements that align with their interests.” This method can be particularly effective when it comes to delivering one's message to the target audience's communication channel/style and can appear to be an organic recommendation that the target audience is interested in ([TechTarget, 2023](#)). Micro-targeting is an overly effective advertisement technique that can influence how individuals think and act. It has proven to be a powerful tool, as it deploys psychological profiling on an individual level and can be also used for political gains, as it has become very popular for political campaign advertising. This is achieved by creating a database of every voter in any state and then creating an individualized profile for each of them. As a result, it is used to find the best way of contacting a specific individual voter and the kind of message that will appear to them ([TechTarget, 2023](#)). Micro-targeting has been criticized in recent years, as consumer protection

groups and other groups raised the issue of this data collection, and how they are then used. For example, the scandal of Cambridge Analytica was an eye opener for a lot of consumers and the public in general on how our data is collected and used. Cambridge Analytica deployed this specific technique of micro-targeting during the 2016 USA presidential election campaign, as well as other campaigns, including the Brexit campaign. The data collection happened in a way that there was a no clear disclaimer that the data would be used for advertising ([TechTarget, 2023](#)).

Another tracking method is **Browsing fingerprinting** ([Bontridder and Pouillet, 2021](#)). Browser fingerprinting is a term used to describe “the act of discreetly gathering software and device settings data through an internet user’s browser when they’re online”. This combination of settings is then used to build a unique identity – or ‘fingerprint’ – for that individual. It’s also sometimes referred to as ‘device fingerprinting’ or simply ‘fingerprinting’ ([Smartframe, 2022](#)).

These tracking methods are used to present specific content to each user. This model, which is based on “the economics of attention”, means that when a user spends a lot of time on a platform it means more economic gain, for example for advertising companies. ([Bontridder and Pouillet, 2021](#)). In this respect, “[t]he advertiser usually sets the targeting parameters (such as demographics and presumed interests), but the platform’s algorithmic systems pick the specific individuals who will see the ad and determine the ad’s placement within the platform” ([Bontridder and Pouillet, 2021](#)). Algorithms keep track of user’s footprints online, with the aim of proposing more related and similar content, which a user is going to most likely engage with. As outlined by the European Commission, algorithms are “affecting the results that users are actively searching for (findability) and the media content that users are passively exposed to (discoverability)” ([Council of the European Union, 2020, para 21](#)).

Another AI related disinformation technique is the deployment of *social bots* that effectively disseminate falsehoods in online platforms. These software bots are designed in such a way that they can mimic how humans behave online and are either fully or semiautomated user accounts online. Some social media bots provide useful services, like weather updates or sports scores. People that interact with this kind of social media bots know that they are bots. On the other hand, there is a large number of social media bots that disguise as humans and spread malicious, harmful or false content. ([Cloudflare, n.d.](#))

This kind of bot can be used for several purposes, such as influencing elections, influencing people’s perspective on world events, manipulating financial markets, intensifying phishing attacks, spreading scams and used to shut down free speech ([Cloudflare, n.d.](#)).

The struggle to separate reality from fiction and facts from fake is a prominent discussion topic when it comes to AI. “News sites” that are filled with AI generated content have already been in the spotlight, and they are expected to grow in large scale. According to expert Mrs. Kate Starbird, generative AI will

deepen the dissemination of misinformation in various ways, as it can be used by those that deliberately want to mislead and manipulate and are proponent of disinformation. It's so easy to generate the content, including micro-targeted messages for the target audience. This can lead to successful and widespread disinformation campaigns. The AI generated content can also be 'poisoned' by those who want to shape the views and opinions in a specific topic. This can be achieved by feeding their content into the inputs. Generative AI can also recycle fake news, conspiracy theories, misinformation and disinformation found on the open web ([Axios, 2023](#)).

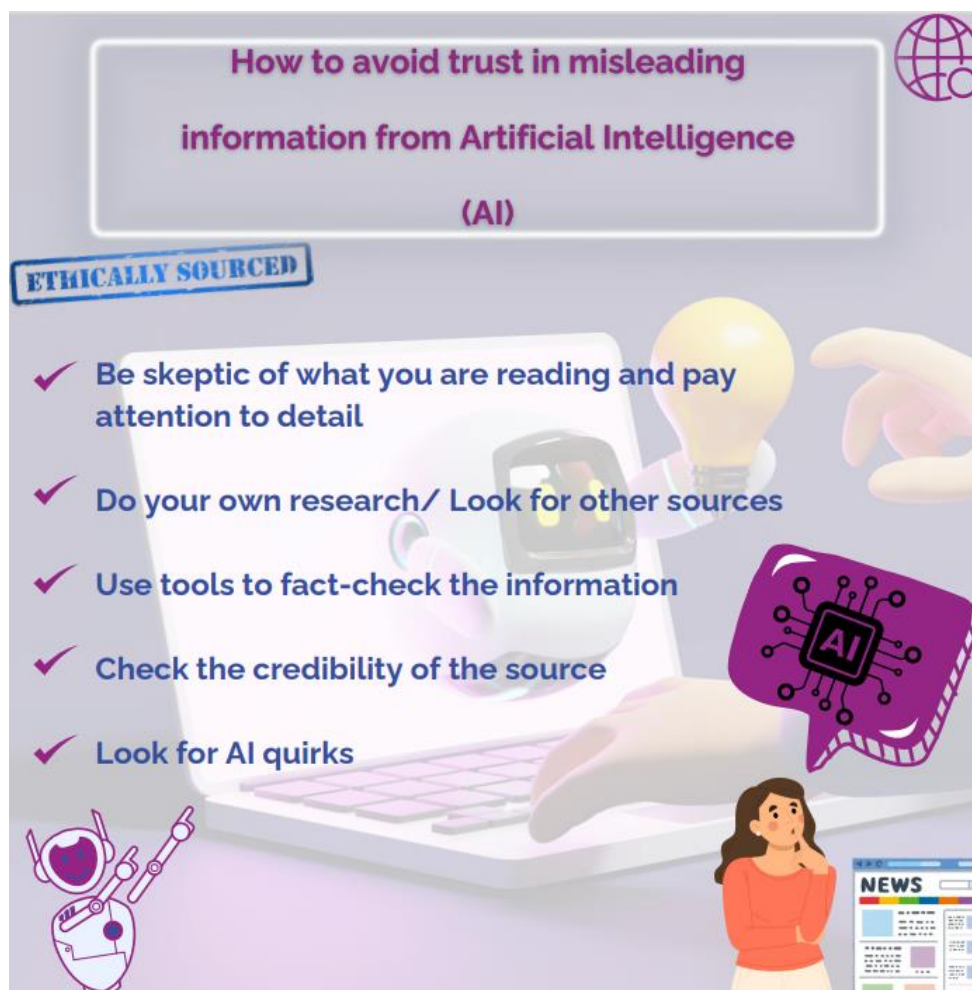
## Detect and debunk AI-generated fake news:

In response to the fast-spreading online disinformation, social media platforms and search engines are increasingly called upon to address this phenomenon, especially in the context of the current "infodemic". For this reason, various technological techniques are being deployed to combat disinformation. Among these techniques, AI techniques are being explored to both detect and regulate false, inaccurate and/or misleading content online. Advanced AI-driven systems can analyze AI patterns, language use and context to aid in content moderation, fact-checking and the detection of false information ([World Economic Forum, 2024](#)).

One method involves training machine learning models using labeled data to distinguish between false and accurate information. However, this method requires large data sets, can lack transparency, and is prone to bias. Another approach focuses on detecting factual inaccuracies by comparing content with external evidence, although human fact-checkers are often more effective at this nuanced task. In addition, AI can analyse an article's style to infer intent, or examine metadata rather than content directly. However, these methods have limitations, including the difficulty of accurately parsing complex language and the need for human intervention to ensure accuracy ([Bontridder and Poulet, 2021](#)).

To detect deepfakes, AI technologies have been developed to distinguish between real and fake content, using algorithms similar to those that generate deepfakes. However, as detection methods become public, deepfake creators adapt, making the detection process more difficult. Other proposed methods include authenticating content at creation and an 'authenticated alibi service' to monitor and verify the actions of individuals, although the latter raises significant privacy concerns ([Bontridder and Poulet, 2021](#)). Other methods include content filtering and removal, blocking access, deprioritizing content, and disabling or suspending accounts. While effective, these measures are invasive and raise ethical concerns about freedom of expression. Decentralized web technologies (Dweb) are also being

explored to protect users' data from surveillance ([Bontridder and Poulet, 2021](#)). Taking into consideration the ethical implications as well, the use of AI to detect and regulate disinformation raises significant ethical concerns, because a major challenge is the lack of a clear and universally agreed-upon definition of disinformation, which complicates the regulation process. The distinction between disinformation and misinformation is particularly problematic, as AI systems often cannot determine the intent behind the content shared ([Bontridder and Poulet, 2021](#)). To detect social bots, AI techniques have been more successful in detecting fake accounts, including bot accounts ([Bontridder and Poulet, 2021](#)).



AI detection tools are valuable for identifying AI-generated content, as well as for detecting deepfakes, but their effectiveness comes with several challenges. These tools use computational methods to analyze media and often provide results as confidence intervals or binary results, such as "AI-created" or "human-made". However, correctly interpreting these results requires expertise, as users may misinterpret the findings without understanding the underlying models, the data used for training, or the limitations of the tool. The accuracy of the detection is highly dependent on the quality and extent

of the training data, as well as the specific algorithms used ([Reuters Institute, 2024](#)). For example, a tool trained to recognize AI-generated images may perform well in detecting content generated by Generative Adversarial Networks (GANs), but may struggle with media generated by diffusion models, such as those used in popular tools like DALL-E or Midjourney. Furthermore, these tools can be fooled by modifying the media, such as by cropping, scaling or reducing the resolution. This has been demonstrated in cases where simple edits led AI detection tools to misclassify synthetic content as real. Also, detection tools may fail to recognize non-AI interference, further hampering their reliability ([Reuters Institute, 2024](#)). While these tools provide a good starting point in the verification process, they should be used alongside other methods such as open-source techniques (OSINT) for a more comprehensive analysis. However, as AI technology and detection tools continue to evolve, keeping up to date on the latest developments is essential ([Reuters Institute, 2024](#)).

Although detecting deepfakes poses a great challenge, there are numerous tools that young people can use to detect and debunk AI-generated fake or misleading news. For example, one free and open-source tool is the [DeepFake-o-Meter](#), made at the University of Buffalo. It serves as an online platform where users can upload samples of videos, images and audios, letting it detect whether they could be AI-generated. The tool results show a rating of between 0% and 100% likelihood of a sample being AI-generated.

The Regulation (EU) 2024/1689 laying down harmonized rules on artificial intelligence, known as AI Act, is Europe's first comprehensive legal framework on AI. It came into force on August 1, 2024, and sets clear rules for high-risk AI applications and establishes enforcement mechanisms. The aim of the new rules is to “foster trustworthy AI in Europe and beyond, by ensuring that AI systems respect fundamental rights, safety, and ethical principles and by addressing risks of very powerful and impactful AI models” ([European Commission, 2024](#)).

In conclusion, as we are entering into a new era of AI dominance in the online world and new legislation is coming into force both at European and national levels, media literacy still plays a crucial role on an individual and collective level to combat disinformation coming from AI or other sources. Young people must be given guidance, support, education, and tools in order to critically analyze the information they come across every day. However, it is difficult to fully debunk disinformation generated by AI, as these systems are constantly evolving and adapting. In addition, it is difficult to determine whether AI-generated data is biased or not. Therefore, when encountering AI-generated content, it is essential to fact-check the information, compare it to other credible sources, and maintain a healthy skepticism to ensure an informed understanding.

## CONCLUSION

The “Fake News, Conspiracy Theories, and how to spot them” Guidebook, defines fake news and conspiracy theories, and it provides useful online and digital tools and games to help diagnose misinformation and conspiracies. From the fake news spread via wall paintings in Ancient Egypt to the modern conspiracy theories spread on social media, people tend to believe information that is portrayed in a simple form, and it resonates with their prior experiences and beliefs (often without checking the validity of the information). Conspiracy theories and fake news could have devastating effects on modern societies, as they create confusion and mistrust between people challenging democratic institutions and leading to an increase of social phenomena like racism and xenophobia, as well as to environmental damage. This guidebook explains the importance of media literacy in researching and identifying fake news and it provides national examples (from Germany, Spain, Greece and Cyprus) of tools and games that can train users to identify and diagnose fake news.

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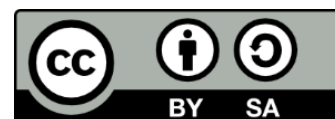
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